

A Platten
Plates
Piastre
Plošče
Desky

Führungselemente
Guide elements
Elementi di guida
Vodilni elementi
Vodící díly

B

C Präzisionsteile
Precision elements
Elementi di precisione
Precizni elementi
Přesné díly

D Temperierelemente
Elements for heating
and cooling
Elementi di raffreddamento
Hladilni elementi
Díly pro temperaci a chlazení

E Federelemente
Springs & elastomers
Molle ed elastomeri
Vzmeti in elastomeri
Pružiny a elastomery

F Zubehör
Accessories
Accessori
Pripomočki
Příslušenství

G Info

B

**FÜHRUNGSELEMENTE / GUIDE ELEMENTS
ELEMENTI DI GUIDA / VODILNI ELEMENTI / VODÍCÍ DÍLY**



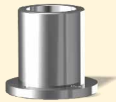
2200 H	22-1	2240 H	22-10
	Führungssäulen mit Zentrierbund Guiding pillars Colonne di guida Vodilni stebri Vodící sloupky		Führungsbuchsen Guiding bushes Bussole di guida Vodilne puše Vodící pouzdra
2210 H	22-4	2241 H	22-11
	Führungssäulen Guiding pillars Colonne di guida Vodilni stebri Vodící sloupky		Führungsbuchsen, Bronze mit Festschmierstoff Guiding bushes bronze with solid lubricant Bussole di guida bronzo con lubrificante solido Vodilne puše, bron s trdim mazivom Vodící pouzdra, bronz, samomazná
2220 H	22-6	2245 H	22-12
	Führungsbolzen Guiding pillars Colonne di guida Vodilni stebri Vodící sloupky		Führungsrohre Guide sleeves Bussole di guida Vodilne cevi Vodící trubky
2221 H	22-7	2245.1 H	22-12
	Führungsbolzen Guiding pillars Colonne di guida Vodilni stebri Vodící sloupky		Scheiben (für 2245) Lining discs (for 2245) Dischi di aggiustaggio (per 2245) Distančníky (za 2245) Distanční podložky (pro 2245)
2230 H	22-8	2246 H	22-13
	Führungsbuchsen mit Zentrierbund Guiding bushes Bussole di guida Vodilne puše Vodící pouzdra		Druckstücke Retaining discs Dischi di ritegno Přidrževalní elementi Přidržovací podložky
2231 H	22-9	2246.1 H	22-13
	Führungsbuchsen mit Zentrierbund, Bronze mit Festschmierstoff Guiding bushes, bronze with solid lubricant Bussole di guida bronzo con lubrificante solido Vodilne puše, bron s trdim mazivom Vodící pouzdra, bronz, samomazná		Ausstoßbolzen Guide bolts for ejection Perni di espulsione Izmetalni stebri Vyhazovací tyče

B

FÜHRUNGSELEMENTE / GUIDE ELEMENTS ELEMENTI DI GUIDA / VODILNI ELEMENTI / VODÍCÍ DÍLY

2247 H

22-14



Ausstoßbuchsen
Guiding bushes for ejection
Bussole di guida per espulsione
Vodilne puše za izmetavanje
Vodící pouzdra pro vyhazování

2255 H

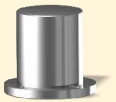
22-17



Führungssäulen mit Bund, für Kugelführung
Guiding pillars with shoulder for ball bearing
Collone con collare per guida a sfere
Vodilni stebri z vencem za kroglično vodenje
Vodící sloupky

2248 H

22-14



Ausstoßbuchsen
Guiding bushes for ejection
Bussole di guida per espulsione
Vodilne puše za izmetavanje
Vodící pouzdra pro vyhazování

2256 H

22-17



Stützbolzen
Support pillars
Colonne di sostegno
Podporni stebri
Podpěrné sloupky

2250 H

22-15



Kugelführungen
Guiding bushes with ball bearing
Bussole di guida con gabbia a sfere
Vodilne puše s kletko s kroglicami
Kuličkové vedení

2257 H

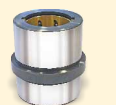
22-18



Federscheiben
Buffer plates with spring clutches for ejector set
Piedini (appoggio tavolino)
Vzmetni podložni čepi
Opěrné podložky

2251.1

22-15



Führungsbuchsen für Kugelführungseinheit
Recirculating ball bushings for ejector set
Boccole guida con gabbia a sfere
Vodilne puše za kroglična vodila
Kuličkové pouzdro pro vyhazovací paket

2258 H

22-18



Scheiben
Buffer plates for ejector set
Piedini (appoggio tavolino)
Podložne ploščice
Podložky

2252 H

22-16



Führungsbuchsen, Bronze mit Festschmierstoff
Guiding bushes bronze with solid lubricant
Bussole di guida bronzo con lubrificante solido
Vodilne puše, bron s trdim mazivom
Vodící pouzdra, bronz, samomazná

2260.0 H

22-19



Zentriereinheiten
Locating units
Elementi di centraggio
Centrirni elementi
Centrážní díly

2254 H

22-16



Führungssäulen, glatt, für Kugelführung
Guiding pillars for ball bearing
Collone di guida liscie per guida a sfere
Vodilni stebri za kroglično vodenje
Vodící sloupky

2260.1 H

22-19



Distanzstücke
Spacers
Dischi di aggiustaggio
Distančníki
Distanční díly



B

**FÜHRUNGSELEMENTE / GUIDE ELEMENTS
ELEMENTI DI GUIDA / VODILNI ELEMENTI / VODÍCÍ DÍLY**

2260.2 H

22-20

1283

22-25



Haltescheiben
Distance washers
Dischi di aggiustaggio
Distanční obroči
Distanční podložky



Winkleleisten, Bronze mit Festschmierstoff
Angled sliding bars, bronze with solid lubricant
Elementi di scorrimento angolari, bronzo con lubrificante solido
Kotne drsne letve, bron s trdim mazivom
Plochá vodící tyč, bronz, samomazná

2262.0 H

22-20

1284

22-26



Führungsaufnahme
Rectangular guiding blocks
Guide rettangolari
Centrirni elementi, jeklo s trdim mazivom
Samomazné centrážní díly



Gleitplatten kleine Abmessungen, Bronze mit Festschmierstoff
Sliding plates, bronze with solid lubricant
Piastre di scorrimento, bronzo con lubrificante solido
Drsne plošče, bron s trdim mazivom
Kluzná deska malých rozměrů, bronz, samomazná

2262.1 H

22-21



Rechteckführung
Rectangular guiding blocks
Guide rettangolari
Centrirni elementi, jeklo s trdim mazivom
Samomazné centrážní díly

2265 H

22-22



Zentrierhülsen
Locating bushes
Bussole centraggio stampi
Centrirne puše
Centrážní trubky

1281

22-23



Flachleisten, Bronze mit Festschmierstoff
Flat sliding bars, bronze with solid lubricant
Elementi di scorrimento piatti, bronzo con lubrificante solido
Drsne letve, bron s trdim mazivom
Plochá vodící tyč, bronz, samomazná

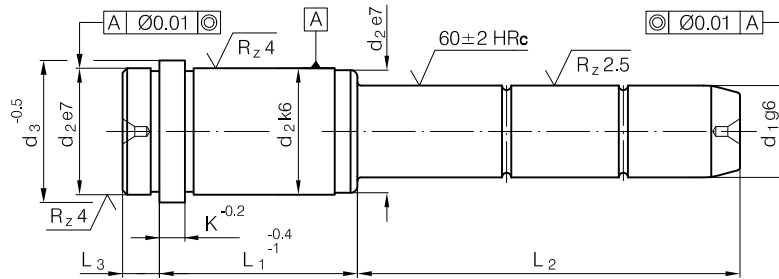
1282

22-24



Winkleleisten, Bronze mit Festschmierstoff
Angled sliding bars, bronze with solid lubricant
Elementi di scorrimento angolari, bronzo con lubrificante solido
Kotne drsne letve, bron s trdim mazivom
Plochá vodící tyč, bronz, samomazná



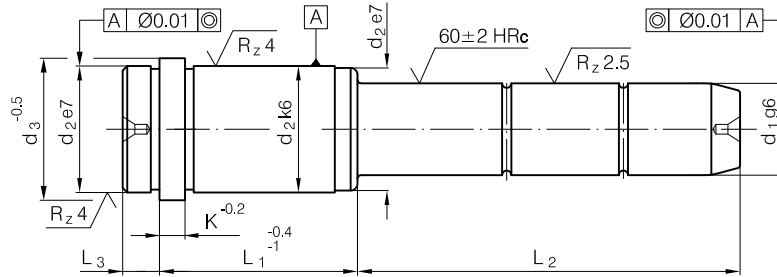


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2200 H - d₁ x L₁ x L₂

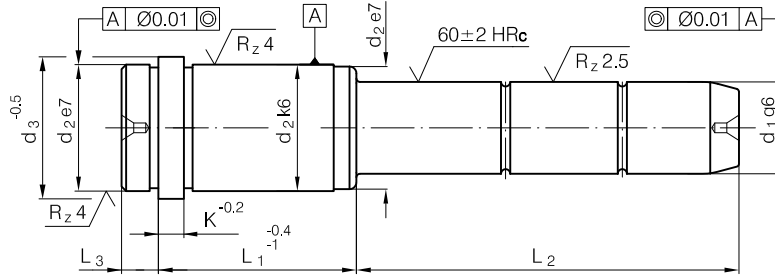
L ₃	K	d ₂	d ₃	d ₁	L ₁	L ₂	L ₃	K	d ₂	d ₃	d ₁	L ₁	L ₂												
3	3	14	16	9/10	12	25	9	6	20	25	14/15	36	75												
						45							95												
						65							125												
						20							155												
						30							35												
						50							45												
					70	65																			
					22	36						85	95	46	25	35	66	76	55	95	105	125	145		
																								55	
																								75	
																								95	
																								20	35
																								30	55
					50	75																			
70	95																								
90	135																								
56	46	70	90	56	35	60	96	86	55	95	55	65	95	125											
															85										
															30										
															45										
															70										
															35										
															60										
															75										
95																									
17	22	30	70	14/15	17	35	27	26	31	18/20	17	35													
												55													
												75													
												95													
												120													
												120													
					30	35																			
					50	45																			
					70	65																			
					90	85																			
					110	85																			
					125	115																			
150	115																								
36	36	35	55	36	35	55	36	27	35	45	65	85	105	125	165	225	245								
																		30							
																		45							
																		65							
																		85							
																		105							
																		125							
																		145							
165																									
35																									
55																									



Mat.: 1.7131

2200 H - d₁ x L₁ x L₂

L ₃	K	d ₂	d ₃	d ₁	L ₁	L ₂	L ₃	K	d ₂	d ₃	d ₁	L ₁	L ₂
9	6	26	31	18/20	36	75	9	6	30	35	22/24	46	45
						95							65
						115							85
						135							105
						165							125
						225							165
					255	205							
					46	35							245
						45							285
						65							35
						85							55
						105							75
		135	95										
		56	165	115									
			245	135									
			35	165									
			55	205									
			75	245									
			95	285									
		66	155	35									
			35	45									
			55	65									
			75	85									
			95	105									
145	125												
76	55	165											
	75	205											
	95	35											
	135	55											
	55	75											
	75	95											
86	95	115											
	125	165											
	55	205											
	75	35											
	95	55											
	125	75											
96	95	95											
	55	115											
	75	135											
	55	175											
	75	195											
	95	215											
116	135	235											
	35	55											
	55	75											
	75	95											
	95	115											
	135	135											
136	17	155											
	55	175											
	75	195											
	35	215											
	55	235											
	75	255											
22	22/24	27	35										
	55	55											
	75	75											
	95	95											
	105	115											
	130	135											
27	35	155											
	55	175											
	75	195											
	95	215											
	115	235											
	135	255											

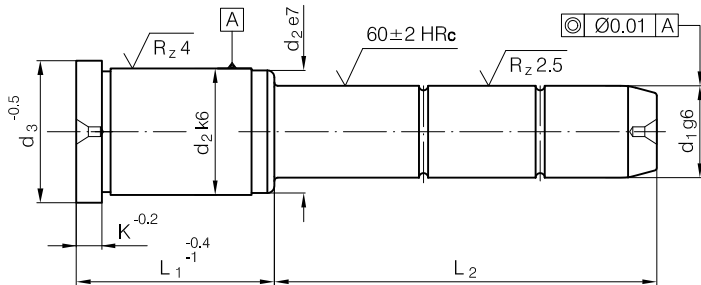


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2200 H - $d_1 \times L_1 \times L_2$

L_3	K	d_2	d_3	d_1	L_1	L_2	L_3	K	d_2	d_3	d_1	L_1	L_2			
9	6	30	35	22/24	86	135	9	6	42	47	30/32	76	225			
					96	125						86	115			
					116	155						96	155			
					136	135						116	205			
					156	155						136	155			
					156	155						156	155			
		6	42	47	30/32	27			105	12	10	54	60	40/42	56	115
						45			165						66	135
						65			245						76	175
						105			285						86	215
						165			285						96	255
						245			285						116	295
	6		42	47	30/32	36		55	12		10	54	60	40/42	136	135
						45		75							156	155
						65		95							196	195
						85		115							136	215
						105		155							156	255
						165		245							196	295
	6	42	47	30/32	46	55		12	10	54	60	40/42	246	165		
					55	75							246	245		
					75	95										
					95	115										
					115	135										
					175	245										



Mat.: 1.7131

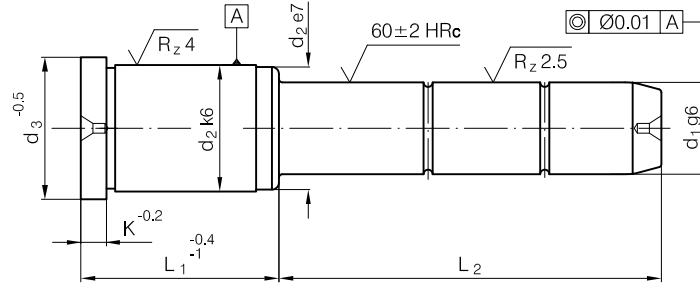


2210 H - d₁ x L₁ x L₂

K	d ₂	d ₃	d ₁	L ₁	L ₂
3	14	16	9/10	17	20
					30
				22	25
					35
				27	55
					30
50					
36	25				
	45				
46	30				
	45				
6	20	25	14/15	22	20
					35
					40
					45
					50
					55
				65	
				70	
				90	
				110	
				27	20
					35
					40
					45
					55
					65
				36	85
					105
20					
35					
40					
45					
46	55				
	65				
	75				
	95				
	20				
	35				
56	45				
	65				
	85				
	105				
	20				
	20				

K	d ₂	d ₃	d ₁	L ₁	L ₂
6	20	25	14/15	56	35
					55
					75
					95
					55
					65
				66	95
					55
					65
					95
					76
					95
86	55				
	95				
	20				
	35				
	40				
	45				
27	26	31	18/20	27	55
					60
					65
					70
					80
					85
				36	115
					20
					35
					40
					45
					50
55	55				
	65				
	75				
	85				
	105				
	125				
36	30	35	22/24	36	20
					35
					40
					45
					50
					55
56	30	35	22/24	36	60
					65
					70
					80
					85
					105
65	30	35	22/24	36	125
					20
					35
					40
					45
					50

K	d ₂	d ₃	d ₁	L ₁	L ₂
6	26	31	18/20	36	70
					75
					80
					95
					115
					135
				46	20
					45
					65
					85
					105
					135
6	26	31	18/20	56	20
					35
					55
					75
					95
					115
				66	55
					75
					95
					55
					75
					95
76	55				
	75				
	95				
	55				
	75				
	95				
86	55				
	75				
	95				
	55				
	75				
	95				
96	55				
	75				
	95				
	115				
	115				
	115				
6	30	35	22/24	27	25
					45
					50
					60
					65
					70
				36	80
					85
					105
					125
					165
					25



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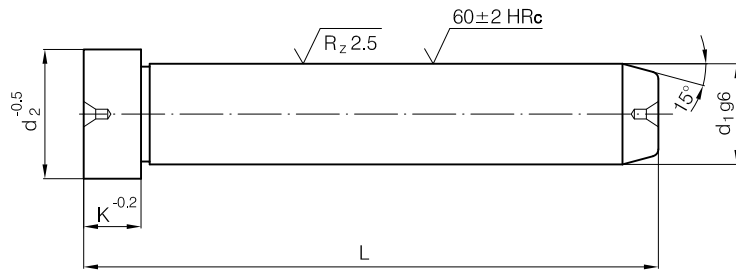


2210 H - d₁ x L₁ x L₂

K	d ₂	d ₃	d ₁	L ₁	L ₂				
6	30	35	22/24	36	55				
					60				
					70				
					75				
					80				
					95				
					115				
					135				
					165				
					25				
					45				
					50				
				46	30	35	22/24	46	60
									65
									70
									80
									85
									105
									125
									165
									25
									45
									55
									56
95									
115									
165									
55									
75									
95									
25									
45									
55									
75									
66	30	35	22/24	66	75				
					95				
					25				
					45				
					55				
					75				
76	30	35	22/24	76	75				
					95				
					115				
					25				
					45				
					55				
86	30	35	22/24	86	75				
					95				
					115				
					155				
					55				
					75				
96	30	35	22/24	96	75				
					95				
					115				
					155				
					55				
					75				
116	30	35	22/24	116	75				
					115				
					155				
					55				
					75				
					115				

K	d ₂	d ₃	d ₁	L ₁	L ₂				
6	30	35	22/24	136	135				
6	42	47	30/32	27	45				
					65				
					105				
					165				
					55				
					75				
					95				
					115				
					155				
					45				
					65				
					46	42	47	30/32	46
				105					
				125					
				165					
				55					
				75					
				95					
				115					
				135					
				175					
				55					
				75					
				56	42	47	30/32	56	95
115									
135									
175									
55									
75									
66	42	47	30/32	66	95				
					115				
					135				
					175				
					55				
					75				
76	42	47	30/32	76	95				
					115				
					155				
					55				
					75				
					95				
86	42	47	30/32	86	95				
					115				
					155				
					55				
					75				
					95				
96	42	47	30/32	96	95				
					115				
					155				
					55				
					75				
					95				
116	42	47	30/32	116	75				
					115				
					155				
					55				
					75				
					115				

K	d ₂	d ₃	d ₁	L ₁	L ₂				
6	42	47	30/32	116	155				
					95				
					115				
					155				
					115				
					155				
				156	42	47	30/32	156	115
									155
									155
									195
									155
									195
10	54	60	40/42	56	75				
					115				
					155				
					195				
					66				
					75				
					135				
					75				
					115				
					175				
					86				
					75				
				135					
				96	54	60	40/42	96	75
									115
									155
									95
									135
									195
									116
									135
									195
									136
									135
215									
156	54	60	40/42	156	115				
					155				
					215				
					155				
					195				
					235				
					196				
					155				
					195				
					235				
					96				
					115				
66	54	60	40/42	66	72				
					50/52				
					136				
					135				
					156				
					155				
					196				
					175				
					96				
					115				
					116				
					135				
20	80	86	60/62	96	115				
					116				
					135				
					136				
					135				
					156				
				196	80	86	60/62	196	175
									96
									115
									116
									135
									136
246	80	86	60/62	246	175				
					156				
					155				
					196				
					175				
					195				



Mat.: 1.7131

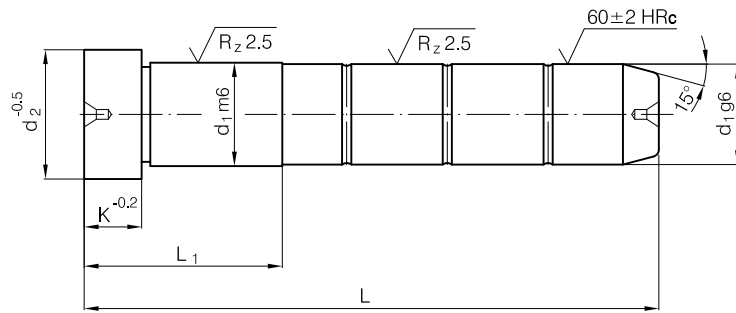


2220 H - $d_1 \times L$

K	d_2	d_1	L	
3	12	9	40	
			60	
			80	
		10	100	
			120	
			120	
6	16	12	40	
			60	
			80	
		14	100	
			120	
			160	
8	18	14	60	
			80	
			100	
		15	120	
			140	
			180	
	20	16	16	40
				60
				80

K	d_2	d_1	L	
8	20	16	100	
			120	
			140	
		18	160	
			60	
			80	
	24	20	100	
			120	
			140	
		22	160	
			180	
			240	
15	26	22	60	
			80	
			100	
		24	120	
			140	
			160	
	28	24	24	80
				100
				120

K	d_2	d_1	L
15	28	24	120
			140
			160
			180
			200
			220
		30	240
			300
			100
			120
			160
			180
	36	30	200
			240
			300
		32	360
			100
			120
	48	40	160
			200
			240
		50	300
			360
			160
58	50	200	
		240	
		300	
	30	360	
		160	
		200	



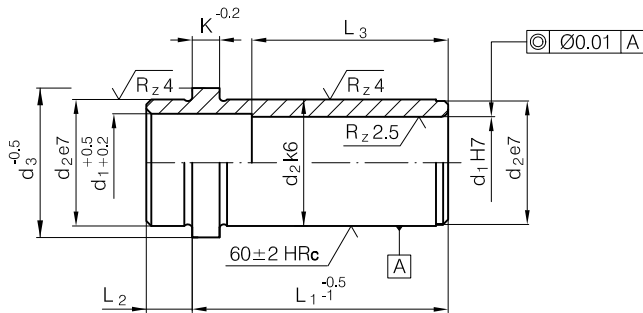
Mat.: 1.7131



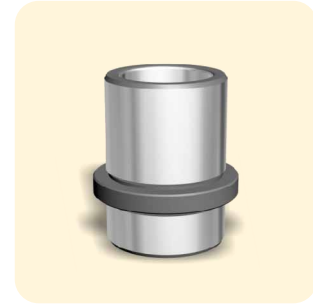
2221 H - $d_1 \times L$

K	L ₁	d ₂	d ₁	L	
3	17	12	10	40	
	17			60	
	22			80	
	27			100	
	27			100	
6	17	16	12	60	
	22			80	
	27			100	
	27			100	
	27			120	
8	17	18	14	60	
	22			80	
	27			100	
	27			120	
	27			140	
	36	140			
	36	160			
	8	17	20	16	60
		22			80
		27			100
		27			120
		27			140
		36	140		
		36	160		
		8	22	22	18
27			100		
27			120		
27	140				
36	160				
36	180				
56	200				
56	200				
8	22	24	20	80	
	27			100	
	27			120	
	36			140	
	36			160	

K	L ₁	d ₂	d ₁	L		
8	56	24	20	180		
	56			200		
15	27	26	22	100		
	27			120		
	36			140		
	36			160		
	46			180		
	56			200		
	56	220				
	15	27	28	24	100	
		27			120	
		36			140	
		36			160	
		46			180	
		56			200	
		56	220			
		15	36	36	30	160
			56			200
			56			240
			15	36	36	32
56				200		
56	240					
15	56	48	40	200		
	56			240		
	56			300		
	56			300		
	15	46	58	50	200	
		56			240	
		56			240	
		56			300	
20	56	68	60	240		
	56			300		
	76			360		



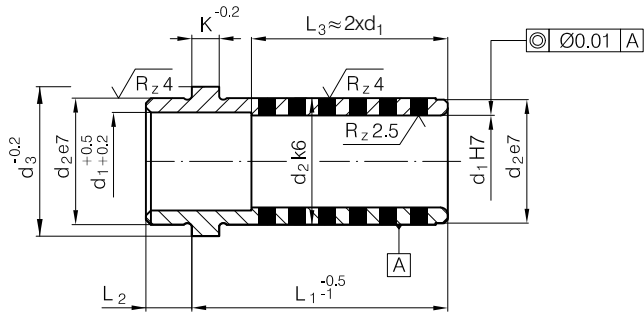
Mat.: 1.7131



2230 H - d₁ x L₁

L ₂	K	d ₂	d ₃	L ₃	d ₁	L ₁		
3	3	14	16	-	9/10	12		
						17		
						22		
						27		
						36		
						46		
						56		
9	6	20	25	-	14/15	66		
						76		
						86		
						96		
						116		
						136		
						156		
		9	6	26	31	-	18/20	17
								22
								27
								36
								46
								56
								66
9	6	30	35	-	22/24	76		
						86		
						96		
						116		
						136		
						156		
						196		
		12	10	54	60	-	40/42	36
								46
								56
								66
								76
								86
								96
12	10	54	60	-	40/42	116		
						136		
						156		
						196		
						246		

L ₂	K	d ₂	d ₃	L ₃	d ₁	L ₁								
9	6	30	35	-	22/24	36								
						46								
						56								
						66								
						76								
						86								
						96								
		9	6	42	47	-	30/32	116						
								136						
								156						
								196						
								12	10	54	60	-	40/42	116
														136
														156
196														
246														

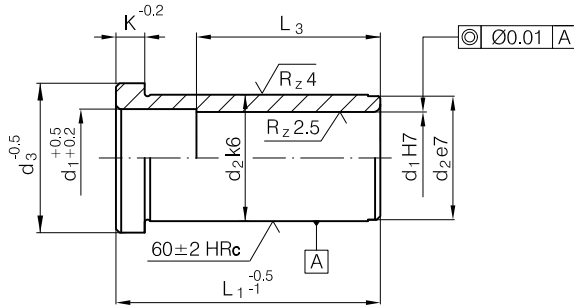


Mat.: CuZn25Al5Mn4Fe3-C

 2231 H - $d_1 \times L_1$

L_2	K	d_2	d_3	d_1	L_1			
3	3	14	16	9/10	12			
					17			
					22			
					27			
					36			
					46			
9	6	20	25	14/15	56			
					66			
					76			
					86			
					96			
					116			
					26	31	18/20	17
								22
								27
		36						
		46						
		56						
		30	35	22/24	22			
					27			
					36			

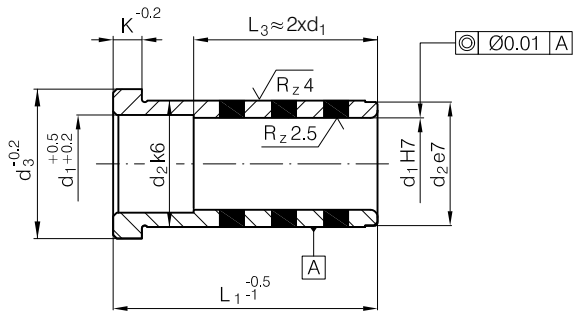
L_2	K	d_2	d_3	d_1	L_1
9	6	30	35	22/24	46
					56
					66
					76
					86
					96
		42	47	30/32	116
					127
					136
					146
					156
					166
					176
					186
					196
12	10	54	60	40/42	46
					56
					66
					76
					86
					96




Mat.: 1.7131

2240 H - d₁ x L₁

K	L ₃	d ₃	d ₂	d ₁	L ₁	
3	-	16	14	9/10	9	
					12	
					17	
					22	
					27	
					36	
					46	
					56	
					66	
					66	
6	-	23	18	12	17	
					22	
					27	
					36	
					46	
					56	
					36	12
					12	
					17	
					22	
6	-	25	20	14/15	27	
					36	
					46	
					56	
					66	
					76	
					86	
					96	
					46	12
					17	
6	-	27	22	16	22	
					27	
					36	
					46	
					56	
					36	17
					22	
					27	
					36	
					46	
6	-	31	26	18/20	56	
					66	
					76	
					86	
					96	
					116	
					56	17
					22	
					27	
					36	
6	-	35	30	22/24	17	
					22	
					27	
					36	
					46	
					56	
					66	
					76	
					86	
					96	
10	-	60	54	40/42	96	
					116	
					136	
					156	
					196	
					246	
					116	17
					22	
					27	
					36	
10	-	72	66	50/52	96	
					96	
					116	
					136	
					156	
					196	
					116	17
					22	
					27	
					36	
20	-	86	80	60/62	96	
					116	
					136	
					156	
					196	
					246	
					136	17
					22	
					27	
					36	



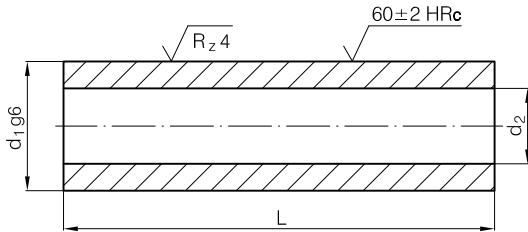
Mat.: CuZn25Al5Mn4Fe3-C

 2241 - d₁ x L₁

K	d ₃	d ₂	d ₁	L ₁
3	16	14	9/10	12
				17
				22
				27
				36
				46
6	23	18	12	56
				17
				22
				27
				36
				46
	25	20	14/15	56
				17
				22
				27
				36
				46
27	22	16	56	
			22	
			27	
			36	
31	26	18/20	56	
			17	
			22	
			27	
			36	
			46	

K	d ₃	d ₂	d ₁	L ₁
6	31	26	18/20	66
				76
				22
				27
				36
				46
	35	30	22/24	56
				66
				76
				86
				96
				27
47	42	30/32	36	
			46	
			56	
			66	
			76	
			86	
10	60	54	96	
			116	
			46	
			56	
			66	
			76	

2245 H



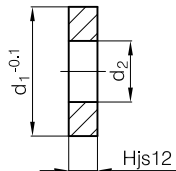
Mat.: 1.7131



2245 H - d₁ x L

d ₂	d ₁	L	d ₂	d ₁	L
6,2	10	20	10,5	18	120
		30			140
		40			160
		50			180
		60			200
		70			220
		80			240
		100			60
		120			80
		140			100
		8,5			14
40	140				
50	160				
60	180				
70	200				
80	240				
100	80				
120	100				
140	120				
160	140				
180	160				
10,5	18	40	17,0	30	180
		60			220
		80			260
		80			300
		100			

2245.1 H



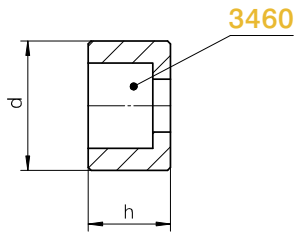
Mat.: 1.7131 60 ± 2HRc



2245.1 H - d₁

d ₂	H	d ₁
6,2	3	14
8,5	4	18
10,5	5	24
13	6	30
17	8	40

2246 H



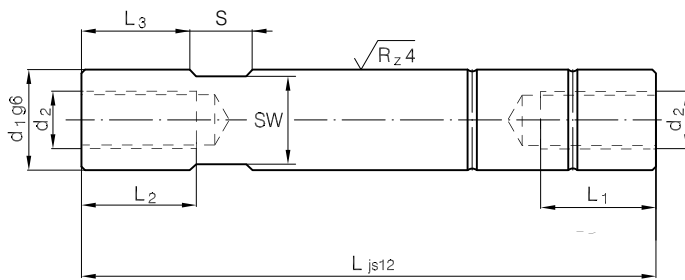
Mat.: 1.1191



2246 H - d

3460	h	d
M6	10	15
M8	14	22
M10	20	36
M12	25	46
M16	32	56

2246.1 H



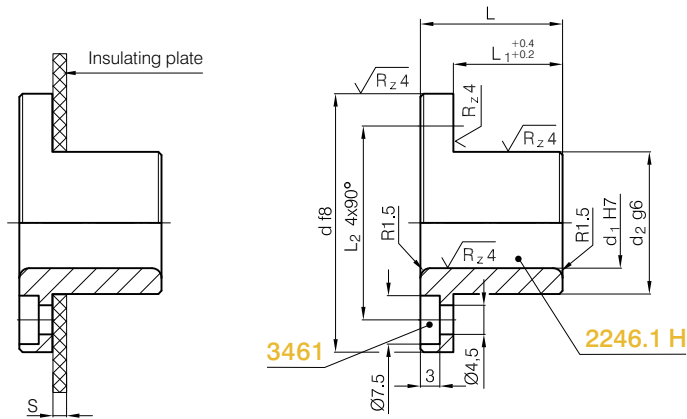
Mat.: 1.7131 60 ± 2HRc



2246.1 H - d₁ x L

L ₁	L ₂	L ₃	S	SW	d ₂	d ₁	L		
10	16	14	8	9	6	10	60		
							70		
							80		
							100		
							120		
							140		
17	25	14	8	12	8	14	60		
							70		
							80		
							100		
							120		
							140		
20	30	16	10	14	10	18	70		
							80		
							100		
							120		
							140		
							160		
		10	17	12	17	12	20	20	80
									100
									120
									140
									160
									180
20	30	28	16	24	16	30	180		
							220		
							260		
							300		
							340		
							380		

2247 H



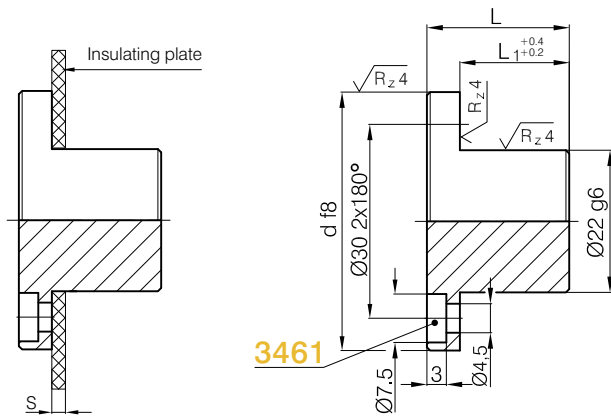
Mat.: 1.7131 60 ± 2HRc

2247 H - d₁ x L x d

s	L ₁	L ₂	d ₂	d ₁	L	d		
-	11,9	30	22	10	17	40		
				14	22			
	16,9			10	17	60		
				14	22			
	22,0			50	32	18	27	100
						20	36	
31,0	24	36						
	22,0	18	27			110		

s	L ₁	L ₂	d ₂	d ₁	L	d		
-	31,0	50	32	20	36	110		
	22,0			18	27	125		
	31,0			20	36	125		
3	14,9	30	22	10	20	40		
				14	20	40		
	19,9			20	60			
				21,9	25	60		
						14	27	

2248 H



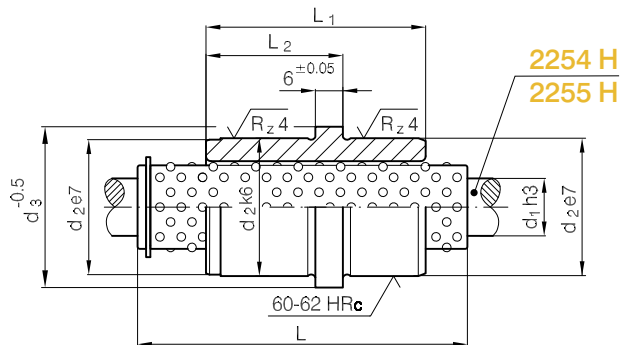
Mat.: 1.1191 750 N/mm²

2248 H - d x L

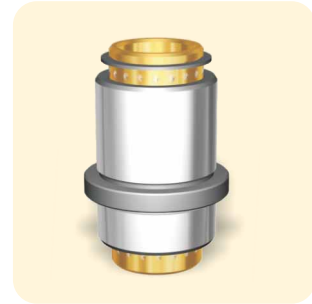
s	L ₁	d	L
-	12,2	40	17
	12,2	60	17
3	15,2	40	20
	17,2		22

s	L ₁	d	L
3	15,2	60	20
5	17,2		22
3	20,2		25
5	22,2		27

2250 H



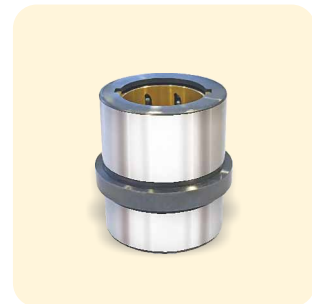
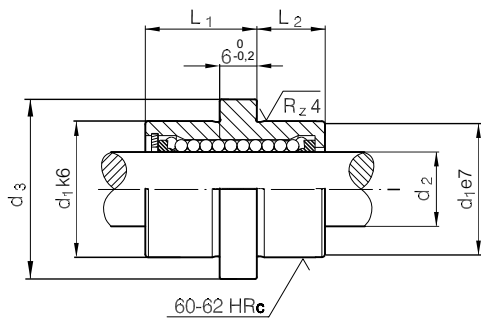
2254 H
2255 H




 2250 H - d₁ x L

L ₁	L ₂	H _{max}	d ₃	d ₂	d ₁	L
24	18	50	26	22	12	40
		82				56
34	23	44	35	30	18	45
		66				56
		96				71
54	33	32	52	46	30	56
		70				75
		110				95

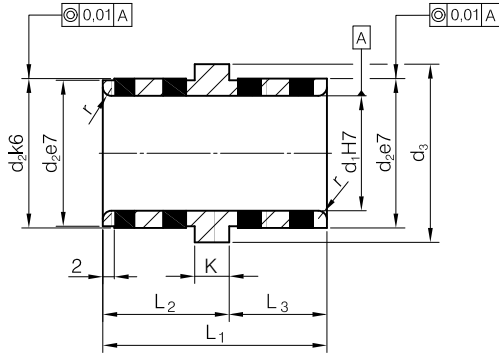
2251.1



 2251.1 - d₂ x L₂ x L₁

d ₁	d ₃	d ₂	L ₂	L ₁
17	20	10	9	12
			17	
22	25	12	9	17
			12	
30	33	18	12	22
			17	
38	41	24	17	27
			22	
46	49	30	22	32
			27	36

2252 H

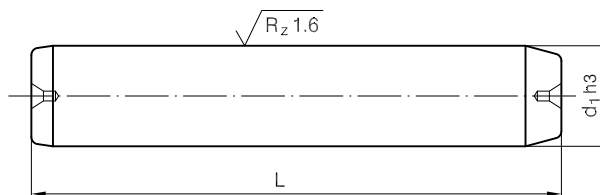


Mat.: CuZn25Al5Mn4Fe3-C

2252 H - d₁ x L₂

L ₁	L ₃	K	d ₃	d ₂	d ₁	L ₂
26	9	3	16	14	10	17
			25	20	14	
39	17	6	31	26	18 20	22
			49	22	35	30
63	27				47	42

2254 H



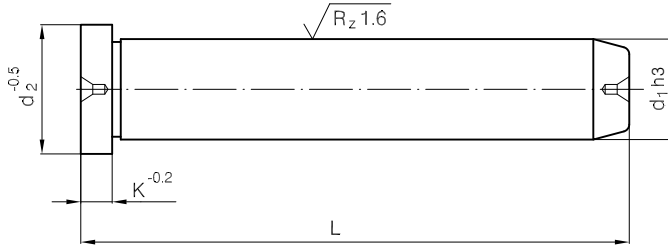
Mat.: 1.7131 60 ± 2HRc



2254 H - d₁ x L

d ₁	L
12	100
	125
18	125
	160
30	160
	250

2255 H



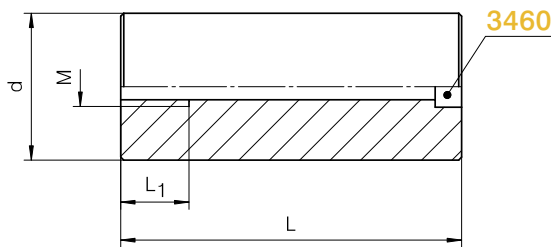
Mat.: 1.7131 60 ± 2HRc



2255 H - d₁ x L

K	d ₂	d ₁	L
4	16	12	80
			100
			120
6	22	18	120
			140
			160
			160
			200
36	30	30	240

2256 H



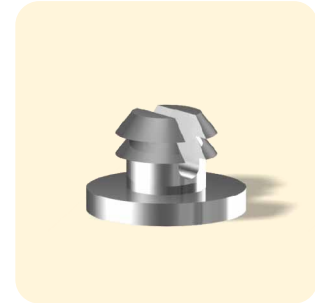
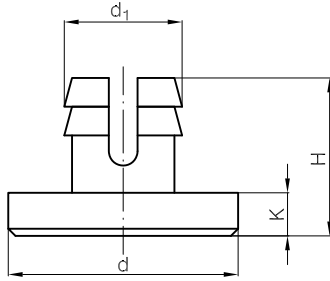
Mat.: 1.1191 750 N/mm²



2256 H - d x L

3460	M	L ₁	d	L				
M6	M8	15	32	46				
				56				
				76				
M8	M10	20	40	46				
				56				
				66				
				76				
				86				
				96				
				116				
				M10	M12	25	80	46
								56
								66
76								
86								
96								
116								

2257 H

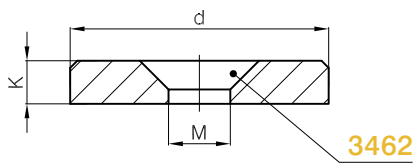


Mat.: 1.7131 60 ± 2HRc

 **2257 H - d**

H	K	d ₁	d
11	3	8	16
			25

2258 H

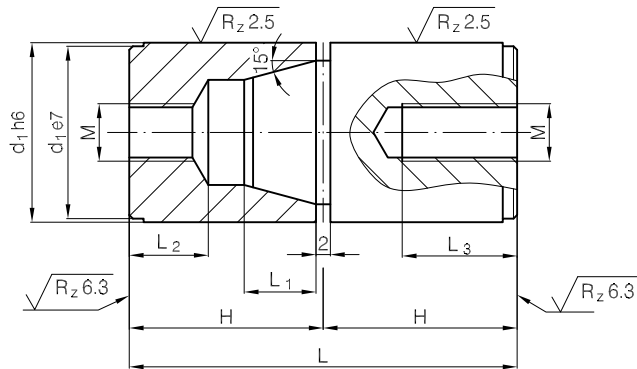


Mat.: 1.1191 750 N/mm²

 **2258 H - d**

M	K	d
M4	3	18
		28
M5	4	20
		30

2260.0 H



Mat.: 1.7131 60 ± 2HRc

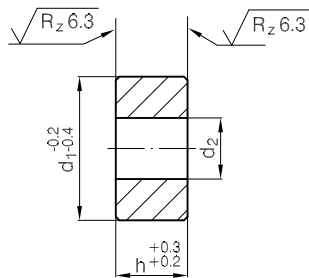


2260.0 H - d_1

L_1	L_2	M	L_3	H	L	d_1
4	9	4	10	17	34	12
6	9	5	10	17	34	14
6	9	5	10	17	34	16
9	11	8	16	27	54	20
10	11	8	16	27	54	25
10	11	8	16	27	54	26
14	13	10	20	36	72	30
14	13	10	20	36	72	32
18	13	10	20	46	92	42



2260.1 H



Mat.: 1.7131 60 ± 2HRc

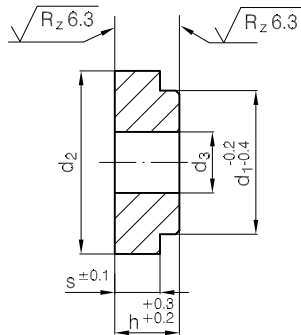


2260.1 H - h x d_1

d_2	h	d_1	d_2	h	d_1	
4,5	10	12	8,5	10	26	
5,5	5	14		20		30
	10					
	14					
	19					
8,5	5	16	11	10	32	
	10					
	19					
	9	20		10	42	
	10					
	20					
9	9	25	13,5	20	54	
	10					
	20					
	20					
18	9	26	17,5	20	80	
	20					



2260.2 H

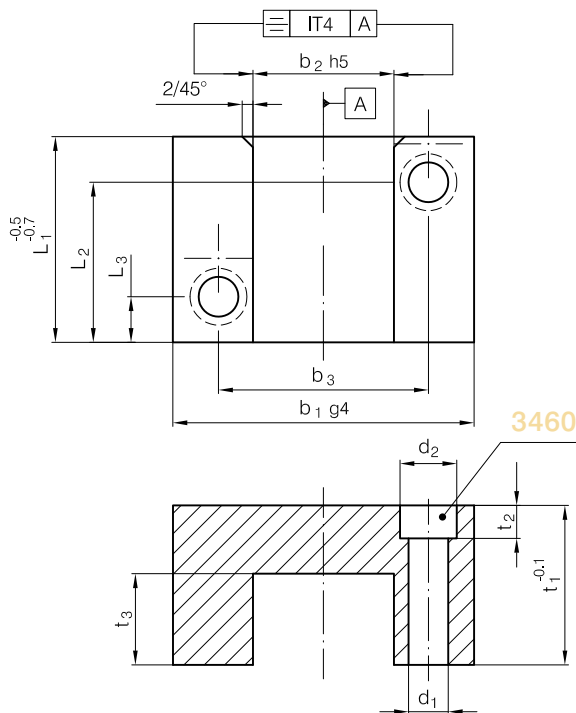


Mat.: 1.7131 60 ± 2HRc

2260.2 H - d₁

h	S	d ₃	d ₂	d ₁
5	3,2	5,5	16	14
9	6,3	8,5	25,5	20
9	6,3	8,5	31,5	26
10	6,3	11	35,5	30
10	6,3	11	47,5	42

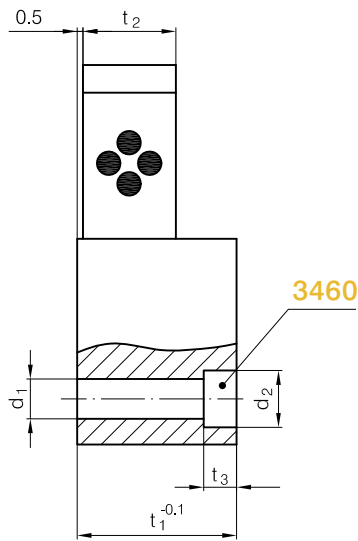
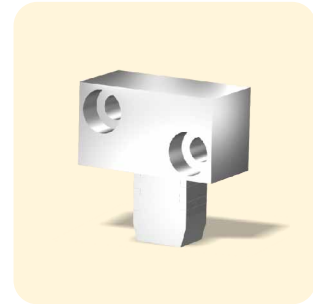
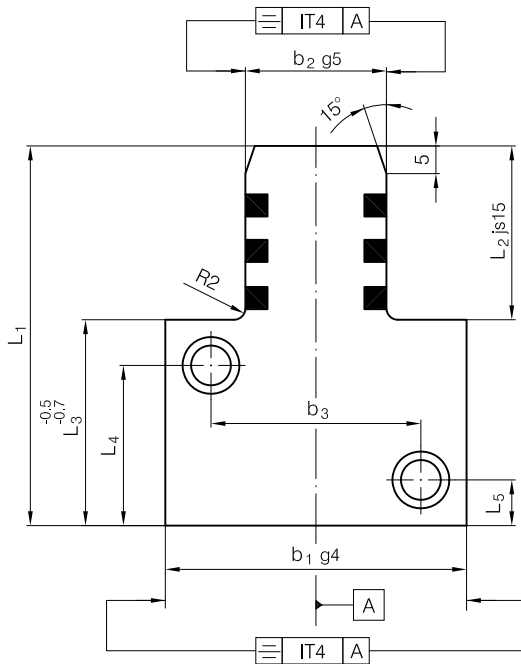
2262.0 H



Mat.: 1.7131 60 ± 2HRc

2262.0 H - L₁ x b₁

t ₁	L ₂	L ₃	b ₂	b ₃	t ₂	t ₃	d ₁	d ₂	L ₁	b ₁
20	15		16	26		12			22	40
22	19	7	20	31	6,8	14	6,6	11	27	45
25	27	9	25	35		15			36	50
32	35	11	32	45	9	20	9	15	46	63
36	40	15	40	60	11	23	11	18	56	85
40	48	18	50	74	13	25	14	20	66	100

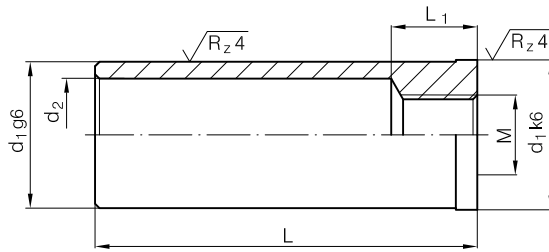


L ₁	b ₁	d ₁	d ₂	t ₃
42	40	6,6	11	6,8
52	45			
68	50			
86	63	9	15	9
106	85	11	18	11
122	100	14	20	13
62	40	6,6	11	6,8
77	45			
99	50			
126	63	9	15	9
156	85	11	18	11
178	100	14	20	13

Mat.: 1.7131 60 ± 2Hrc

2262.1 H - L₁ x b₁

t ₁	L ₂	L ₃	L ₄	L ₅	b ₂	b ₃	t ₂	L ₁	b ₁
20	20	22	15	7	16	26	11	42	40
22	25	27	19		20	31	13	52	45
25	32	36	27	9	25	35	14	68	50
32	40	46	35	11	32	45	19	86	63
36	50	56	40	15	40	60	22	106	85
40	56	66	48	18	50	74	24	122	100
20	40	22	15	7	16	26	11	62	40
22	50	27	19		20	31	13	77	45
25	63	36	27	9	25	35	14	99	50
32	80	46	35	11	32	45	19	126	63
36	100	56	40	15	40	60	22	156	85
40	112	66	48	18	50	74	24	178	100



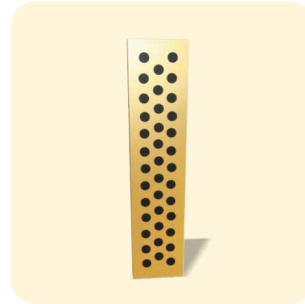
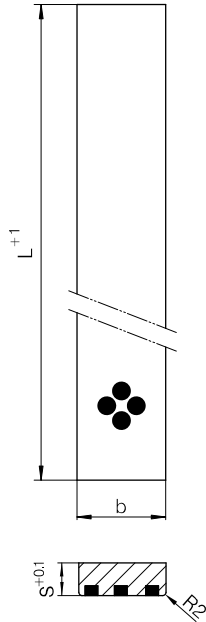
Mat.: 1.7131 60 ± 2HRc



 2265 H - $d_1 \times L$

L_1	M	d_2	d_1	L				
8	8	11	14	20				
				30				
				40				
				50				
				60				
				70				
				80				
				100				
				12	12	16	20	30
								40
50								
60								
70								
80								
100								
120								
21	26	21	26			60		
						80		
						100		
						120		
						140		
						160		
						180		
						25	30	40

L_1	M	d_2	d_1	L		
		25	30	60		
				80		
				100		
				120		
				140		
				160		
				180		
		33	42	33	42	200
						240
						40
						60
						80
						100
						120
43	54	43	54	140		
				160		
				200		
				240		
				280		
				300		
				280		

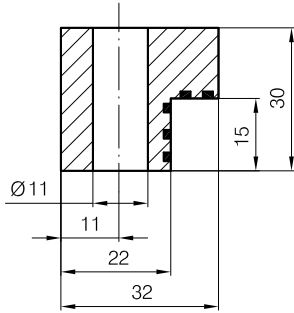


 **1281 - b x L x s**

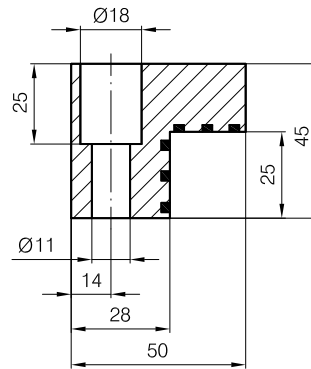
b	L	s	
20	305	4	
	605	10	
	1005	12	
	1005	12	
25	305	5	
	500		
	605		
	1005		
30	500	6	
	605		
	1005		
	500	8	
	605		
	1005		
35	605	10	
	1005		
	1005		
40	500	8	
	605		
	1005		
	500	10	
	605		
	1005		
	500		12
	605		
1005			
50	500	16	
	605		
	1005		
	1005		8
	500		

b	L	s
50	605	12
	1005	
	605	
	1005	
60	605	8
	1005	
	605	10
	1005	
	605	
	1005	
75	500	12
	605	
	1005	
	1005	
80	500	16
	605	
	1005	
	500	20
	605	
	1005	
100	500	10
	1005	
	1005	12
	605	
	500	
125	605	20
	1005	
	1005	
160	1005	

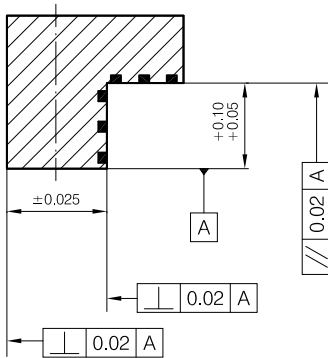
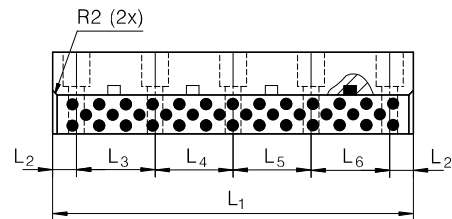
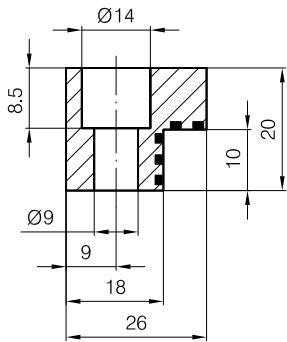
Form D





Form F



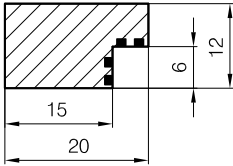
Form H



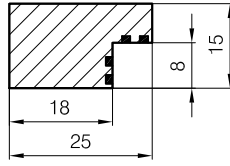
 1282 - Form_x L₁

L ₂	L ₃	L ₄	L ₅	L ₆		Form	L ₁
20	60	-	-	-	2 x M8	H	100
	55	55	-		3 x M8		150
		50	55		4 x M8		200
	60	-	-		2 x M10	D	100
	55	55	-		3 x M10		150
		50	55		4 x M10		F
	70	70	70			250	
	55	50	55			200	
	70	70	70			250	
	65	65	65		65	5 x M10	300
80	75	75	80	350			

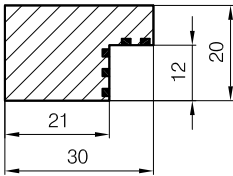
Form A



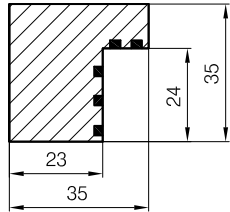
Form B



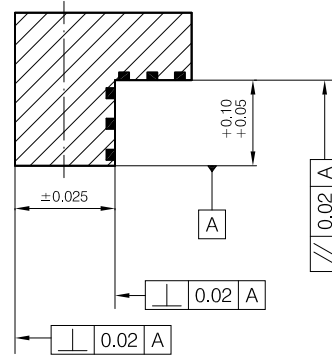
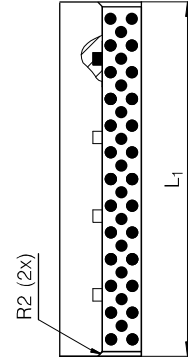
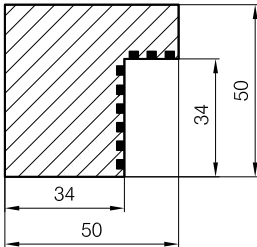
Form C



Form E



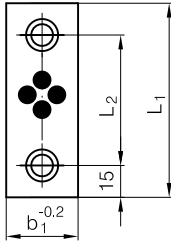
Form G



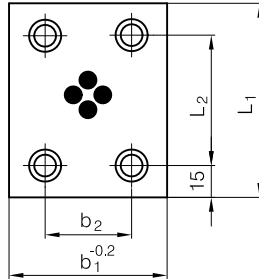
1283 - Form_x L₁

Form	L ₁ =500	L ₁ =605	L ₁ =1005
A	■	■	■
B	■	■	■
C	■	■	■
D	■	■	■
E	■	■	■
G	■	■	■

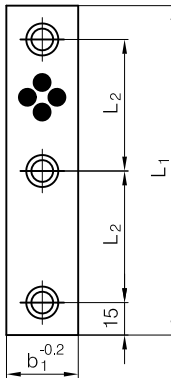
Form A



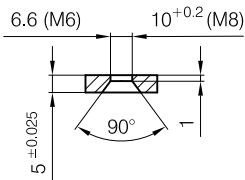
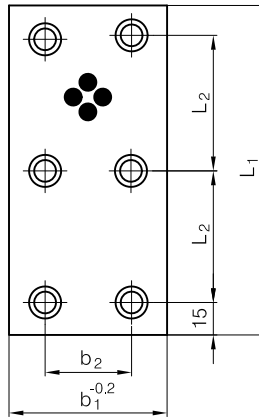
Form C



Form B



Form C



1284 - $b_1 \times L_1$

L ₂	Form		b ₂	b ₁	L ₁
20	A	M6	-	18	50
45					75
70	B	M6	-	18	100
60					150
20	A	M8	-	28	50
45					75
70	B	M8	-	28	100
60					150
20	A	M8	-	38	50
45					75
70	B	M8	-	38	100
60					150
45	A	M8	-	48	75
70					100
95	B	M8	-	48	125
60					150
45	C	M8	45	75	75
70					100
95	D	M8	45	75	125
60					150
70	C	M8	70	100	100
95					125
60	D	M8	70	100	150