

### PERMANEX SL 3-8

Type	BOYUTLAR					KAPAK		PAKETLEME
	d	D	H	V	Module	Exokol	Items/ Europalette	
	mm	mm	mm	dm <sup>3</sup>	cm	h		
SL 3	80	110	150	0,8	2,4	20	630	
SL 4	100	140	150	1,2	2,9	20	360	
			300	2,4	3,2			
SL 5	120	160	150	1,7	3,2	20	315	
			300	3,4	3,7			
SL 6	140	180	200	3,1	3,9	20	175	
SL 6/250	140	180	250	3,8	4,1	20	150	
SL 6/300	140	180	300	4,6	4,2	20	125	
			400	6,2	4,5			
SL 7	160	205	200	4,0	4,3	20	140	
			300	6,0	4,8			
			400	8,0	4,9			
SL 8	180	230	200	5,1	4,6	20	105	
			300	7,6	5,2			
			400	10,2	5,5			

### PERMANEX SL 9-12

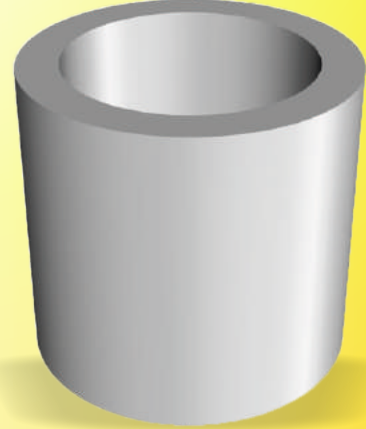
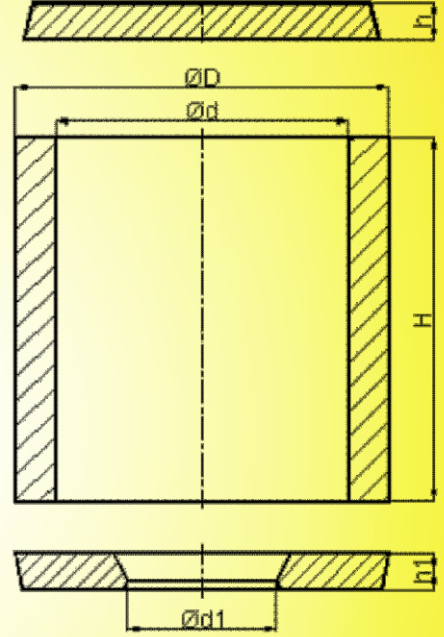
Type	BOYUTLAR					KAPAK		PAKETLEME
	d	D	H	V	Module	Exokol	Items/ Europalette	
	mm	mm	mm	dm <sup>3</sup>	cm	h		
SL 9	200	250	200	6,3	4,9	20	98	
SL 9/300	200	250	300	9,4	5,6	20	70	
SL 9/350	200	250	350	11,0	5,7	20	56	
			400	12,6	5,9			
			500	15,7	6,2			
			600	18,9	6,4			
SL 9.5	225	280	200	8	5,4	20	77	
			300	12	6,1			
			400	16	6,4			
			500	20	6,6			
			600	24	6,8			
SL 10	250	305	200	9,8	5,6	20	56	
SL 10/300	250	305	300	14,7	6,4	20	40	
			400	19,6	7,0			
			500	24,5	7,3			
SL 10.5	275	330	200	11,9	6,0	20	49	
			300	17,8	6,9			
			400	23,8	7,4			
SL 11	300	360	200	14,2	6,2	20	42	
SL 11/300	300	360	300	21,3	7,2	20	30	
			400	28,3	7,9			
			500	35,5	8,4			
			600	42,6	8,6			
			700	49,5	8,9			
SL 12	350	415	200	19,3	6,8	20	28	
			300	28,9	7,9			
			400	38,5	8,8			
			500	48,0	9,4			
			600	57,8	9,8			
			700	67,3	10,0			

### PERMANEX SL 13-15

Type	BOYUTLAR					KAPAK		PAKETLEME
	d	D	H	V	Module	Exokol	Items/ Europalette	
	mm	mm	mm	dm <sup>3</sup>	cm	h		
SL 13	400	465	200	25,2	7,0	25	21	
			300	37,7	8,4			
			400	50,2	9,4			
			500	62,8	9,9			
			600	75,4	10,5			
			700	88,0	10,9			
			800	100,5	11,2			
SL 14	450	515	200	31,8	7,4	25	14	
			300	47,7	9,0			
			400	63,6	10,0			
			500	79,5	10,9			
			600	95,4	11,5			
			700	111,3	11,9			
			800	127,2	12,3			
			900	143,0	12,6			
			1000	159,0	12,8			
SL 15	500	565	200	39,2	7,8	25	14	
			300	58,9	9,5			
			400	78,5	10,8			
			500	98,2	11,6			
			600	117,8	12,3			
			700	137,4	12,9			
			800	157,1	13,3			
			900	176,7	13,7			
			1000	196,4	14,0			

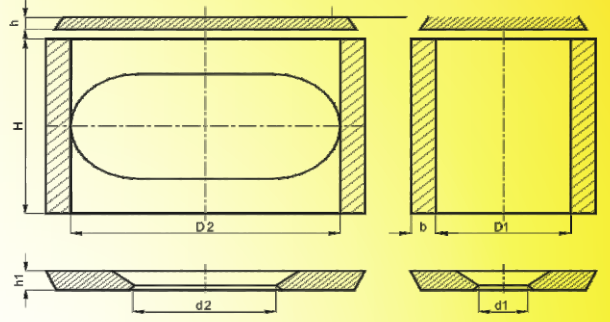
### PERMANEX SL 16-18

Type	BOYUTLAR					KAPAK		PAKETLEME
	d	D	H	V	Module	Exokol	Items/ Europalette	
	mm	mm	mm	dm <sup>3</sup>	cm	h		
SL 16	550	618	200	47,5	8,1	25	7	
			500	118,7	12,4			
			600	142,5	13,2			
			700	166,2	13,8			
			800	190,0	14,3			
			900	213,8	14,7			
			1000	237,5	15,1			
SL 17	600	670	200	56,6	8,1	25	7	
			600	169,8	13,5			
			700	198,1	14,2			
			800	226,4	14,7			
			900	254,7	15,2			
			1000	283,0	15,6			
SL 18	650	722	200	66,4	8,4	25	7	
			600	199,2	14,2			
			700	232,4	15,0			
			800	265,6	15,6			
			900	298,8	16,1			
			1000	332,0	16,6			



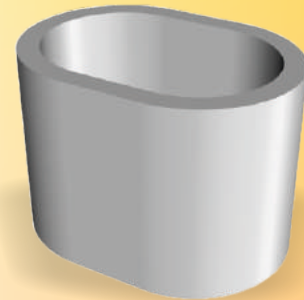
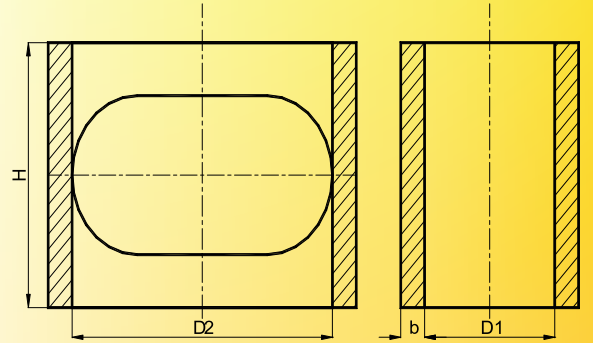
**PERMANEX SL-OV**

Type	BOYUTLAR						KAPAK	PAKETLEME
	D1	D2	b	H	V	Module		
	mm	mm	mm	mm	dm <sup>3</sup>	cm	h	
SL 4 OV	60	140	15	150	1,2	2,5	20	432
SL 5 OV	80	160	20	150	1,7	3,0	20	297
SL 5 OV/225	80	160	20	225	2,5	3,2	20	
SL 6 OV	100	200	20	200	3,5	3,9	20	175
				300	5,3	4,2		
SL 7 OV	120	240	22	200	5,1	4,4	20	112
				300	7,7	4,8		
				400	10,3	5,1		
SL 8 OV	140	280	24	200	7,0	4,8	20	98
				300	10,5	5,6		
				400	14,0	5,9		
SL 9 OV	160	320	26	200	9,1	5,2	20	70
				300	13,7	5,9		
				400	18,3	6,4		
SL10 OV	180	360	28	200	11,6	5,5	20	56
				300	17,3	6,4		
				400	23,1	6,8		
SL11 OV	200	400	30	200	14,3	6,1	20	49
				300	21,4	6,8		
				400	28,6	7,5		
				500	35,7	7,8		



**PERMANEX SL-OV**

Type	BOYUTLAR						PAKETLEME
	D1	D2	b	H	V	Module	
	mm	mm	mm	mm	dm <sup>3</sup>	cm	
SL 9-15 OV	90	135	20	150	1,6	3,0	288
SL 10-15 OV	100	150	20	150	1,9	3,3	270
SL 11-15 OV	110	165	20	150	2,3	3,5	225
SL 12-20 OV	120	180	20	200	3,7	4,1	168
SL 13-20 OV	130	195	20	200	4,3	4,4	147
SL 13-20 OV/250	130	195	20	250	5,4	4,6	
SL 13/20OV/300	130	195	20	300	6,4	4,8	
SL 14-20 OV	140	210	22	200	5,0	4,5	126
SL 16-20 OV	160	240	22	200	6,6	5,0	91
				300	9,9	5,6	
SL 18-20 OV	180	270	22	200	8,3	5,2	77
				300	12,5	5,9	
SL 20-20 OV	200	300	24	200	10,3	5,5	63
				300	15,4	6,4	
				400	20,6	6,8	
SL 22-20 OV	220	330	26	200	12,4	5,9	56
				300	18,7	6,8	
SL 22-20 OV/400	220	330	26	400	24,9	7,4	35
SL 25-20 OV	250	375	28	200	16,0	6,4	42
SL 25-20 OV/250	250	375	28	250	20,0	6,9	
SL 25-20 OV/300	250	375	28	300	24,1	7,4	
				400	32,1	8,1	
				500	40,1	8,6	

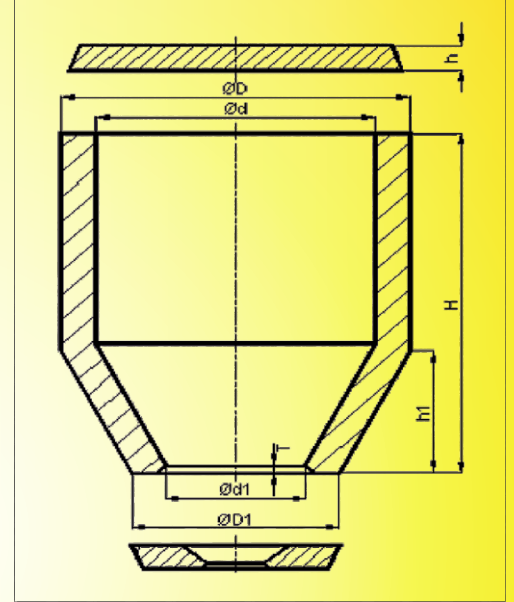


**PERMANEX SL-OV**

Type	BOYUTLAR						PAKETLEME
	D1	D2	b	H	V	Module	
	mm	mm	mm	mm	dm <sup>3</sup>	cm	
SL 27-20 OV	270	405	30	200	18,7	6,7	35
				300	28,0	7,8	
				400	37,4	8,6	
				500	46,6	9,1	
SL 30-20 OV	300	450	32	200	23,2	7,0	28
SL 30-20 OV/250	300	450	32	250	29,0	7,7	
SL 30-20 OV/300	300	450	32	300	34,7	8,4	
				400	46,3	9,3	
				500	57,9	9,9	

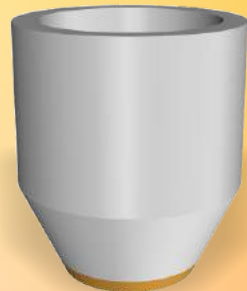
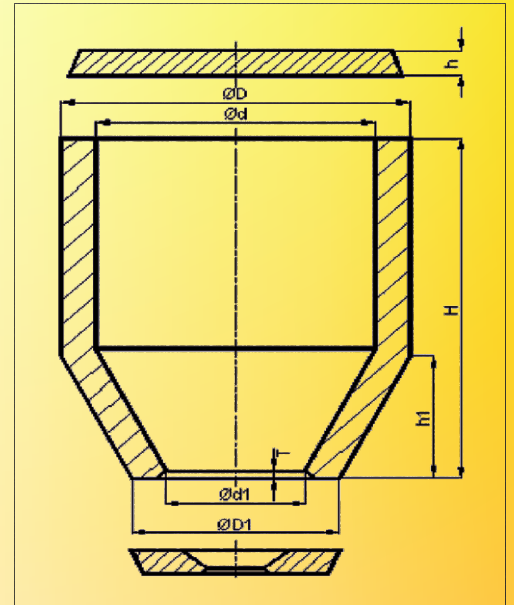
**PERMANEX SL-PK**

Type	BOYUTLAR										KAPAK	PAKETLEME
	D	d	D1	d1	H	h1	T	V	Module	Exokol	Items/ Europalette	
	mm	mm	mm	mm	mm	mm	mm	dm <sup>3</sup>	cm	h		
SL 3 PK-s	130	94	76	48	150	43	4	0,9	2,7	20	486	
SL 4 PK-s	157	118	97	60	150	50	4	1,4	3,2	20	315	
SL 4/5 PK-s	192	147	120	70	165	68	6	2,3	3,8	20	192	
SL 5 PK-s	192	147	120	70	195	68	6	2,75	4,1	20	168	
SL 5.5 PK-s	192	147	142	90	195	50	6	3,0	4,2	20	168	
SL 5/6 PK-s	222	175	132	87	200	90	6	3,9	4,4	20	105	
SL 6 PK-s	222	175	132	87	250	90	6	5,1	4,8	20	90	
SL 7 PK-s	250	200	150	100	250	100	6	6,5	5,1	20	78	
SL 8 PK-s	285	225	164	110	250	115	6	8,0	5,5	20	66	
SL 8.5 PK-s	288	225	180	127	260	90	6	8,2	5,9	20	66	
SL 9 PK-s	310	252	180	124	300	120	8	12,2	6,2	20	40	
SL 10 PK-s	360	300	210	150	300	140	8	17,0	7,0	20	30	
SL 11 PK-s	410	355	240	175	300	155	8	22,6	7,7	20	20	
SL 13 PK-s	530	450	295	215	300	190	8	33,7	8,8	25	10	



**PERMANEX SL...PKA**

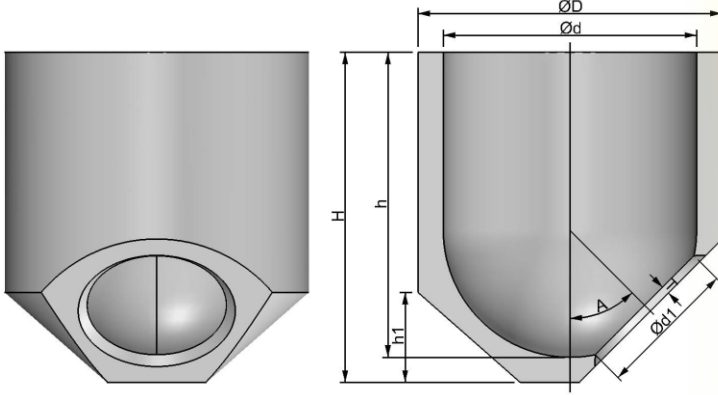
Typ	BOYUTLAR										KAPAK	PACKAKING
	D	d	D1	d1	H	h1	V	Module	Exokol	Items/ Europalette		
	mm	mm	mm	mm	mm	mm	dm <sup>3</sup>	cm	h			
SL 3 PKA	130	94	91	57	138	31	0,8	2,7	20	486		
SL 4 PKA	157	118	111	69	138	38	1,3	3,2	20	315		
SL 4/5 PKA	192	147	135	80	150	53	2,1	3,8	20	192		
SL 5 PKA	192	147	135	80	180	53	2,6	4,1	20	168		
SL 5/6 PKA	222	175	146	96	185	75	3,6	4,4	20	105		
SL 6 PKA	222	175	146	96	235	75	4,8	4,8	20	90		
SL 7 PKA	250	200	170	114	230	80	6,2	5,1	20	78		
SL 8 PKA	285	225	181	125	230	90	7,7	5,5	20	66		
SL 9 PKA	310	252	202	137	280	100	11,8	6,2	20	40		
SL 10 PKA	360	300	231	163	280	120	16,3	7,0	20	30		
SL 10.5 PKA	360	300	265	190	300	95	18,8	7,3	20	30		
SL 11 PKA	410	355	262	189	280	135	22,1	7,7	20	20		



**PERMANEX SL-PKA B1K**

Type	BOYUTLAR										KAPAK	PAKETLEME
	D	d	D1	d1	H	h1	h	T	V	Module	Exokol	Items/ Europalette
	mm	mm	mm	mm	mm	mm	mm	mm	dm <sup>3</sup>	cm	h	
SL 3 PKA B1K	130	94	76	48	150	43	12	4	0,9	2,7	20	486
SL 4 PKA B1K	157	118	97	60	150	50	12	4	1,4	3,2	20	315
SL 4/5 PKA B1K	192	147	120	70	165	68	15	6	2,3	3,8	20	192
SL 5 PKA B1K	192	147	120	70	195	68	15	6	2,75	4,1	20	168
SL 5/6 PKA B1K	222	175	132	87	200	90	15	6	3,9	4,4	20	105
SL 6 PKA B1K	222	175	132	87	250	90	15	6	5,1	4,8	20	90
SL 7 PKA B1K	250	200	150	100	250	100	20	6	6,5	5,1	20	78
SL 8 PKA B1K	285	225	160	110	250	110	20	6	8,0	5,5	20	66
SL 9 PKA B1K	310	252	180	124	300	120	20	8	12,2	6,2	20	40
SL 10 PKA B1K	360	300	210	150	300	140	20	8	17,0	7,0	20	30
SL 11 PKA B1K	410	355	240	175	300	155	20	8	22,6	7,7	20	20

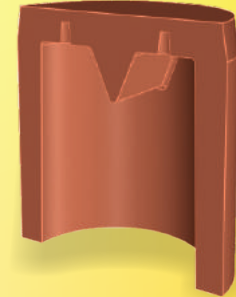
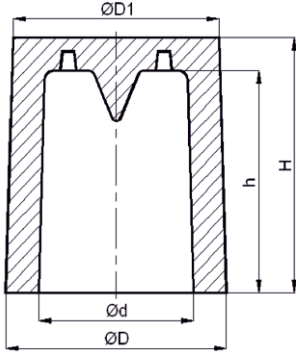
**PERMANEX FSL - A**



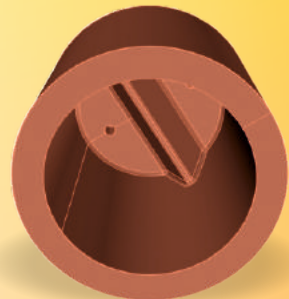
Type	BOYUTLAR									KAPAK	PAKETLEME
	D	d	d1	H	h	h1	T	V	Module	Exokol	Items/ Europalette
	mm	mm	mm	mm	mm	mm	mm	dm <sup>3</sup>	cm	h	
FSL 7 A45	250	205	105	325	305	60	12	9,0	5,1	20	60
FSL 9 A45	305	254	140	330	305	90	8	13,3	7,0	20	32



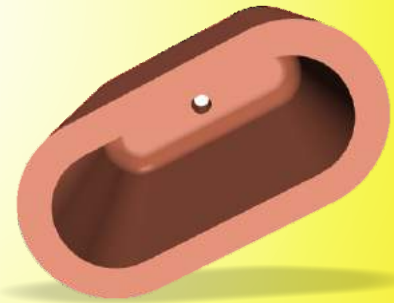
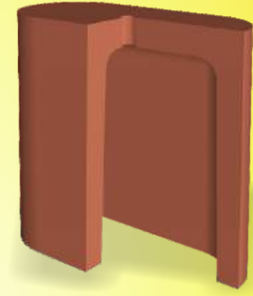
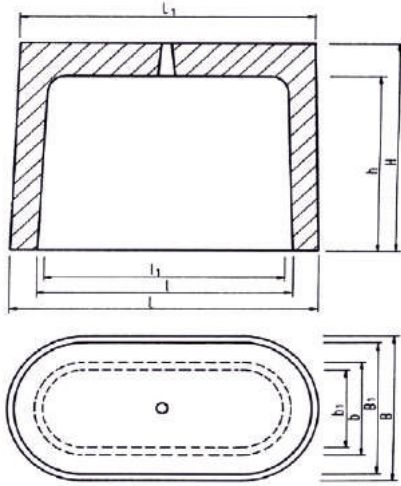
**Ekzotermik Silindirik Besleyici  
EKM Serisi**



FERRAL, Exothermidnsulatingsleeves								
Type	D	H	D1	d	h	Module	V	
	mm	mm	mm	mm	mm	cm	dm <sup>3</sup>	
EKM 35/50 W	53	49,5	49	35	39,5	1,0	0,03	
EKM 40/50	59	52	56	41,5	40	1,0	0,04	
EKM 40/70 W	62,5	71,5	59	41,5	63	1,2	0,07	
EKM 40/95 W	63	97	59	42,5	85	1,3	0,10	
EKM 50/80 W	73,5	80	70	52	70	1,5	0,13	
EKM 60/90 W	80	91	76	57,5	78,5	1,7	0,18	
EKM 60/120 W	79	116,5	73	58,5	105	1,8	0,25	
EKM 70/100 W	94	99	89,5	69,5	87	2,0	0,30	
EKM 80/110 W	102	108	99	79	96,5	2,25	0,42	
EKM 90/120 W	115	120	110	89	104,5	2,5	0,58	
EKM 100/130 W	127,5	133	119,5	97	118	2,8	0,80	
EKM 120/150 W	154,5	150	148	118	130	3,2	1,35	

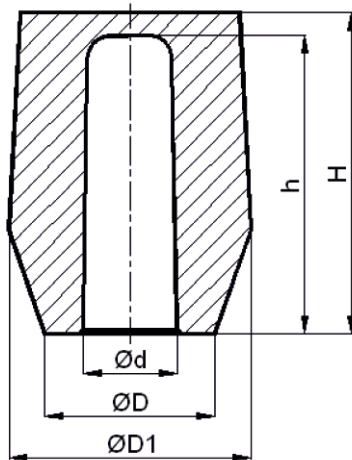


## Ekzotermik Oval Besleyici EK-0 Serisi



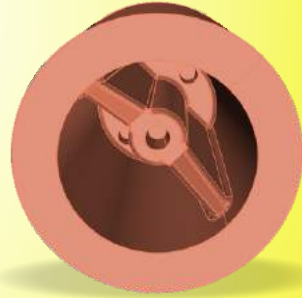
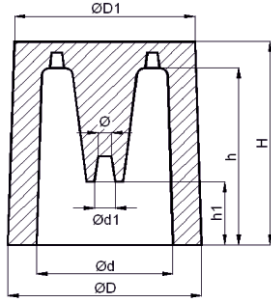
FERRAL, Exothermidüslatıngıleeves													
Type	BOYUTLAR											Module cm	V dm <sup>3</sup>
	L mm	B mm	H mm	l mm	b mm	h mm	L <sub>1</sub> mm	l <sub>1</sub> mm	B <sub>1</sub> mm	b <sub>1</sub> mm			
EK 1 - 0	71,5	52	89,5	52,5	33	80	64	39	44	21	1,2	0,09	
EK 1 - 0 W	71,5	52	89,5	52,5	33	80	64	46,5	44	28	1,3	0,10	
EK 2 - 0	130	73	100	104	44	84	126	100	70	42	1,8	0,34	
EK 4 - 0	1425	70,5	130	117	45,5	115	134	106	61,5	35	2,0	0,48	
EK 6 - 0	173	98,5	138	145	71	123	1635	137	88	63	2,8	1,06	

## Ekzotermik Kompakt Besleyici CK Serisi



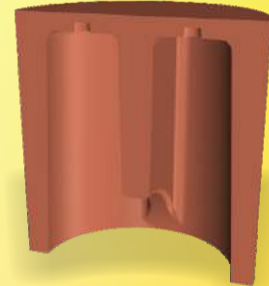
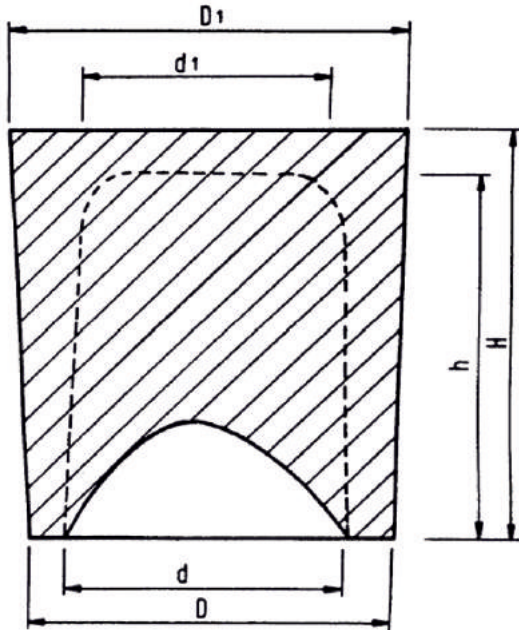
FERRAL, Exothermidüslatıngıleeves								
Type	BOYUTLAR						Module cm	V dm <sup>3</sup>
	D mm	H mm	D1 mm	d mm	h mm			
CK 25	30	60	44	16	50	0,8	0,01	
CK 35/62	38	62	54	21	50	1,0	0,02	
CK 35/2	40	78	59	25	70	1,2	0,03	
CK 40	38	100	63	21	85	1,3	0,03	
CK 50	60	110	74	36	97	1,7	0,09	

## Ekzotermik Silindirik Besleyici EK-T Serisi



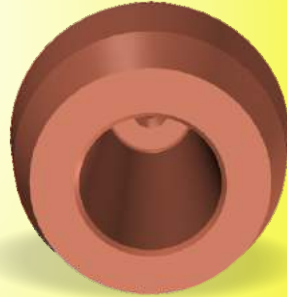
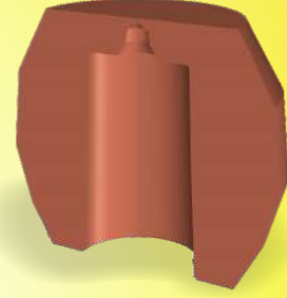
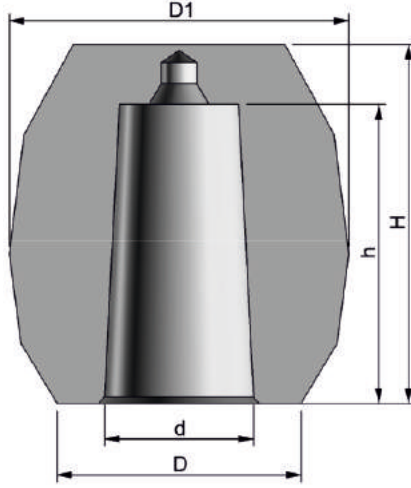
FERRAL, Exothermidnsulatingsleeves									
Type	BOYUTLAR								
	D mm	H mm	D1 mm	d mm	h mm	h1 mm	< / d1	Module cm	V dm <sup>3</sup>
EK 50 T	74	81	69	52	70	25	5/8	1,7	0,11
EK 60 T	81	89	76	56	76	25	5/8	1,9	0,12
EK 60/120 T	78	116	70	56	104	25	5/8	2,1	0,15
EK 70 T	92	100	88	66	86	28	5/8	2,3	0,19
EK 70/130 T	92	130	88	67	117	28	5/8	2,5	0,26
EK 80 T	102	108	98	78	96	28	5/8	2,6	0,28
EK 80/140 T	102	140	99	77	128	28	5/8	2,8	0,38
EKM 90/120 T	115	120	110	89	104	31	5/7	2,9	0,47
EK 100 T	127	130	119	100	112	35	6/8	3,1	0,64
EK 110/150 T	140	150	130	110	132	38	6/8	3,5	0,87
EK 120 T	150	150	145	122	130	40	6/8	3,7	1,25
EK 120/125 T	140	125	129	113	108	4	-	3,0	1,05
EK 120/200 T	150	200	145	122	180	40	6/8	4,0	1,65
EK 150 T	193	200	185	151	184	60	-	5,1	2,50

## Ekzotermik Silindirik Besleyici K-T Serisi



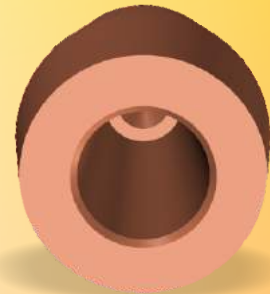
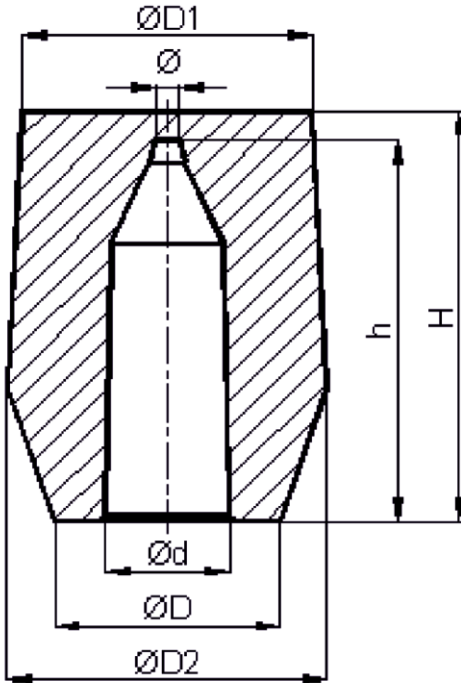
FERRAL, Exothermidnsulatingsleeves								
Type	BOYUTLAR						Module cm	V dm <sup>3</sup>
	D mm	d mm	h mm	D1 mm	d1 mm	H mm		
K 130 T	164	130	135	170	120	150	4,5	1,40
K 150 T	186	152	184	192	139	198	5,1	2,55
K 200 T	250	206	179	258	192	200	5,9	4,90

**Ekzotermik Kompakt Besleyici  
CKM Serisi**



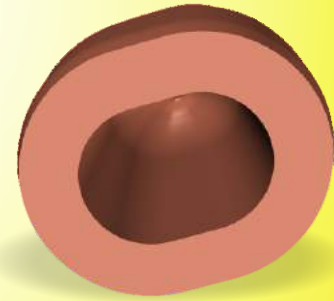
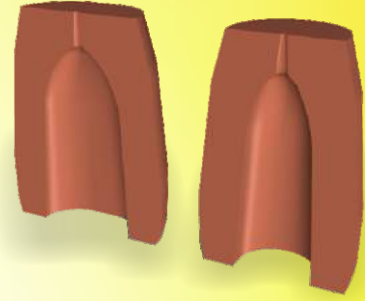
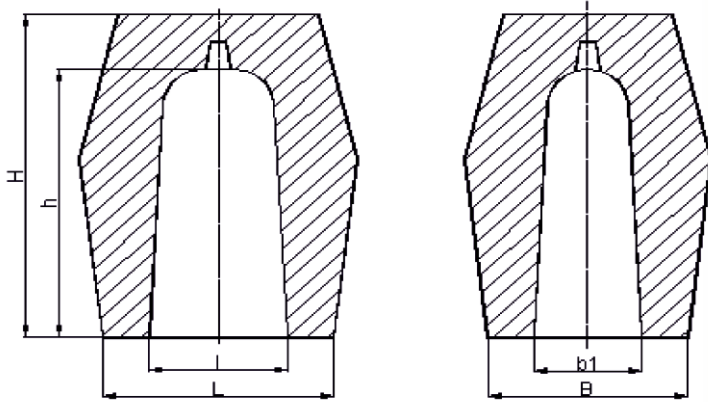
FERRAL, Exothermidnsulatingsleeves							
Type	BOYUTLAR						
	D mm	H mm	D1 mm	d mm	h mm	Module cm	V dm <sup>3</sup>
CKM 60	78	140	100	40	110	1,9	0,125
CKM 70	82	120	114	50	100	2,2	0,159
CKM 80	90	140	134	50	120	2,5	0,191
CKM 90	98	140	134	58	120	2,8	0,276
CKM 100	106	145	134	65	120	3,2	0,339
CKM 110	106	200	134	62	175	3,4	0,415
CKM 120	110	205	170	80	165	4,2	0,780

**Ekzotermik Silindirik Besleyici  
CK-SZ Serisi**



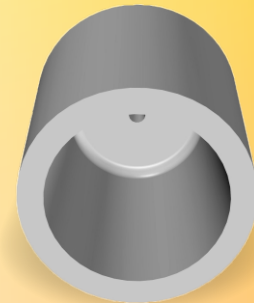
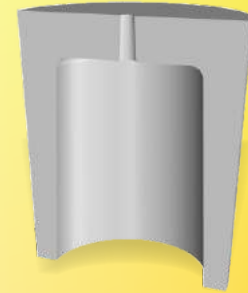
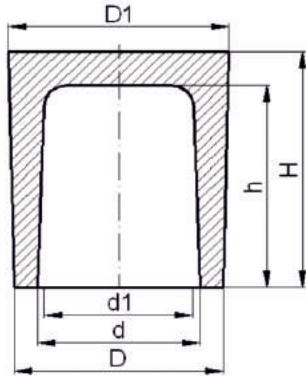
FERRAL, Exothermidnsulatingsleeves									
Type	BOYUTLAR								
	D mm	d mm	D2 mm	h mm	D1 mm	< mm	H mm	Module cm	V dm <sup>3</sup>
CK 40/107 SZ	50	27	62	101	58	7/8	107	1,3	0,04

## Ekzotermik Kompakt Besleyici CK-OV Serisi



FERRAL, Exothermidinsulatingsleeves								
Type	BOYUTLAR							
	L mm	l mm	B mm	b1 mm	H mm	h mm	Module cm	V dm <sup>3</sup>
CKM 3 OV	120	75	100	55	165	140	3,2	0,37
CK 4 OV	120	75	100	55	165	140	4,0	0,37

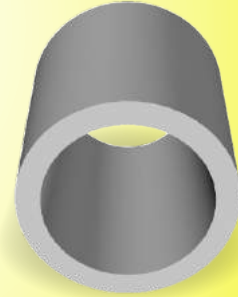
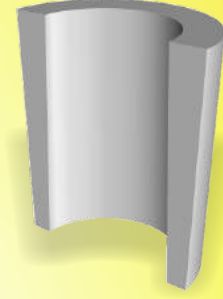
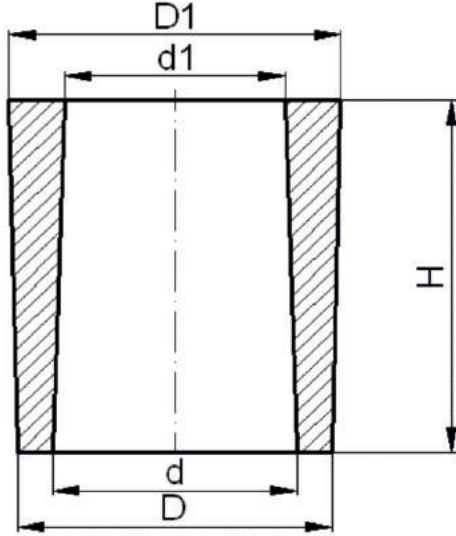
## Ekzotermik Silindirik Besleyici K Serisi



FERRALEX, Exothermidinsulatingsleeves								
Type	BOYUTLAR							
	D mm	d mm	h mm	D1 mm	d1 mm	H mm	Module cm	V dm <sup>3</sup>
K 40/70	60	45	65	64	36	75	1,2	0,08
K 40/95	60	45	84	65	36	95	1,3	0,11
K 50/80	65	50	68	75	48	82	1,4	0,13
K 60/90	76	60	80	82	52	92	1,6	0,20
K 70/100	90	70	92	100	64	110	1,9	0,32
K 80/110	100	80	100	107	72	114	2,1	0,42
K 90/120	110	90	110	117	82	130	2,4	0,64
K 100/130	120	100	112	135	92	134	2,7	0,81

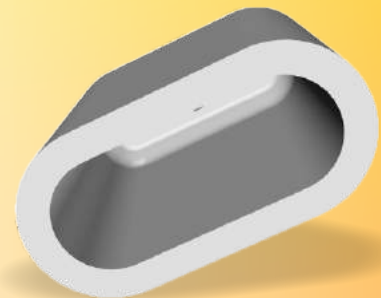
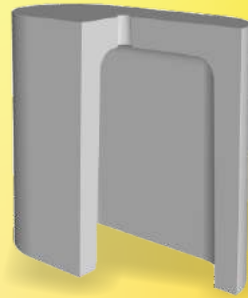
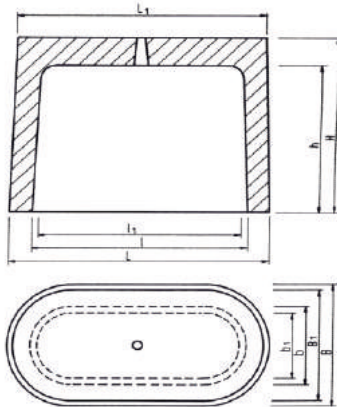


## Ekzotermik Silindirik Besleyici H Serisi



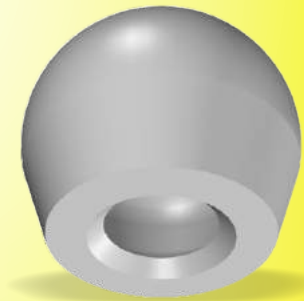
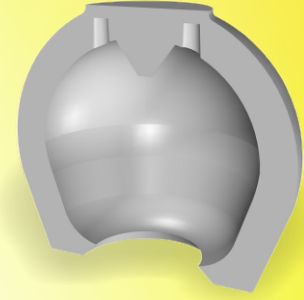
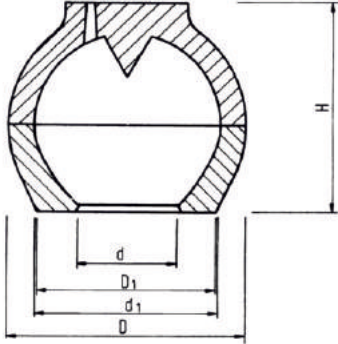
FERRALEX, Exothermicinsulating sleeves							
Type	BOYUTLAR						
	D mm	d mm	D1 mm	d1 mm	H mm	Module cm	V dm <sup>3</sup>
H 60/90	74	57	80	52	90	1,7	0,21
H 70/100	90	70	99	65	110	2,0	0,39
H 80/110	100	80	107	72	114	2,2	0,52
H 90/120	106	90	115	81	120	2,4	0,69
H 100/130	120	98	133	91	133	2,7	0,95
H 120/150	145	120	152	110	150	3,2	1,56

## Oval Besleyici OV Serisi



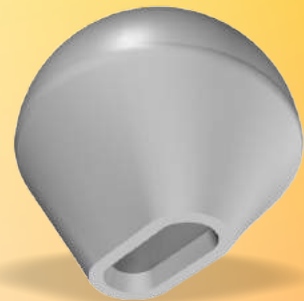
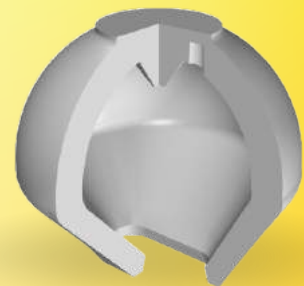
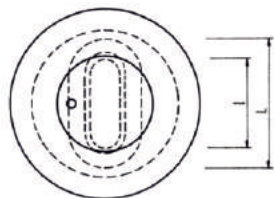
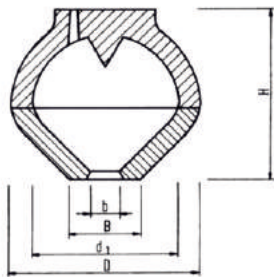
FERRALEX, Exothermicinsulating sleeves												
Type	BOYUTLAR											
	L mm	B mm	H mm	I mm	b mm	h mm	L <sub>1</sub> mm	I <sub>1</sub> mm	B <sub>1</sub> mm	b <sub>1</sub> mm	Module cm	V dm <sup>3</sup>
OV 0	95	60	100	77	43	90	87	69	51	35	1,6	0,23
OV I	141	72	99	120	46	89	135	114	64	40	1,9	0,41
OV II	190	77	123	165	55	110	187	158	73	49	2,3	0,86
OV III	260	96	168	220	56	150	251	210	87	46	2,5	1,56

**Küresel Besleyici  
KU Serisi**



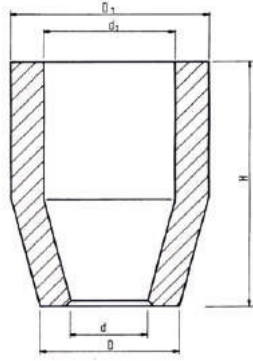
FERRALEX, Exothermic insulating spherical sleeves							
Type	BOYUTLAR						
	D1 mm	d mm	d1 mm	D mm	H mm	Module cm	V dm <sup>3</sup>
Ku 7-s	69	38	70	90	80	1,8	0,18
Ku 8-s	80	45	80	108	90	2,0	0,29
Ku 9-s	90	45	84	115	103	2,3	0,36
Ku 10-s	99	50	100	130	115	2,6	0,55
Ku 11-s	106	52	110	140	130	2,7	0,72
Ku 12-s	124	60	120	160	148	3,0	1,05
Ku 13-s	131	73	130	170	150	3,3	1,26
Ku 13/50s	131	52	130	170	150	3,3	1,20
Ku 14-s	140	70	140	180	170	3,5	1,46
Ku 15-s	149	75	150	190	180	3,8	1,87
Ku 16-s	167	83	167	216	200	4,2	2,71
Ku 18-s	179	90	180	230	210	4,7	3,34

**Küresel Besleyici  
KU-F Serisi**

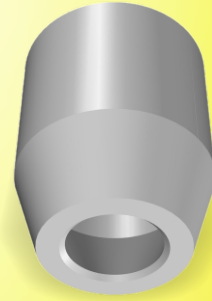


FERRALEX, Exothermicinsulating sleeves									
Type	BOYUTLAR								
	L mm	B mm	l mm	b mm	d <sub>i</sub> mm	D mm	H mm	Module cm	V dm <sup>3</sup>
Ku 7F-s	61	34	46	14	70	90	80	1,8	0,16
Ku 8F-s	72	40	48	18	80	108	90	2,0	0,25
Ku 9F-s	72	34	52	18	84	115	108	2,3	0,31
Ku 10 F-s	72	37	55	20	100	120	112	2,6	0,49
Ku 11 F-s	74	46	52	18	110	140	130	2,7	0,60
Ku 12 F-s	94	60	58	23	120	160	148	3,0	0,87
Ku 14 F-s	100	77	60	30	140	180	170	3,5	1,40

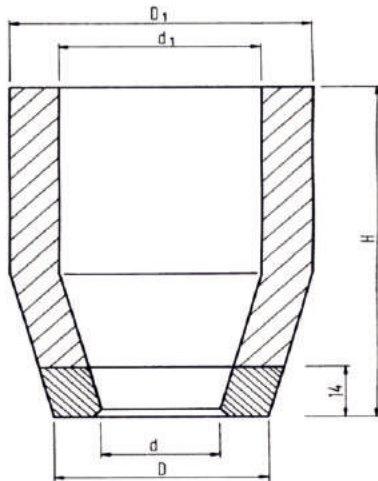
## Besleyici Re Serisi



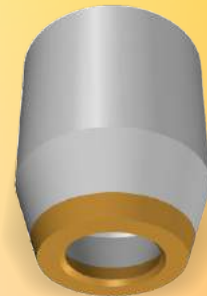
FERRALEX, Exothermic insulating sleeves							
Type	BOYUTLAR						
	D mm	d mm	D <sub>1</sub> mm	d <sub>1</sub> mm	H mm	Module cm	V dm <sup>3</sup>
Re 0-s	53	28	75	50	93	1,5	0,16
Re 0 A-s	61	31	90	65	99	1,7	0,26
Re 1-s	68	32	100	75	100	1,9	0,33
Re 2-s	73	43	110	84	100	2,1	0,44
Re 2 A-s	73	43	110	84	120	2,2	0,58
Re 3-s	87	55	124	95	150	2,7	0,90
Re 4-s	95	66	148	118	150	3,1	1,27
Re 5-s	120	73	190	145	185	3,9	2,50
Re 6-s	140	82	220	158	250	4,4	4,04
Re 6 A-s	150	100	220	158	250	4,4	4,38
Re 7-s	160	94	250	190	250	5,0	5,75
Re 7 A-s	180	120	250	190	250	5,0	6,25



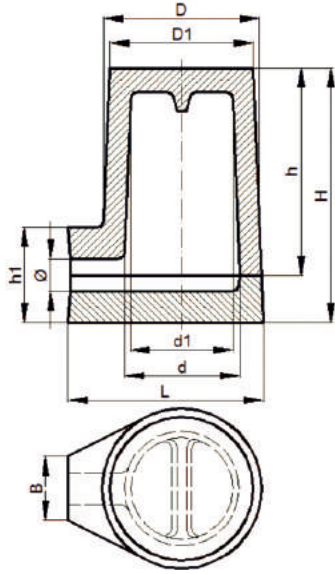
## Besleyici Re-BK Serisi



FERRALEX, Exothermic insulating sleeves							
Type	BOYUTLAR						
	D mm	d mm	D <sub>1</sub> mm	d <sub>1</sub> mm	H mm	Module cm	V dm <sup>3</sup>
Re 1 BK	68	32	100	75	100	1,9	0,33
Re 2 BK	73	43	110	84	100	2,1	0,44
Re 2 A BK	73	43	110	84	120	2,2	0,58
Re 3 BK	87	55	124	95	150	2,7	0,91
Re 4 BK	95	66	148	118	150	3,1	1,39

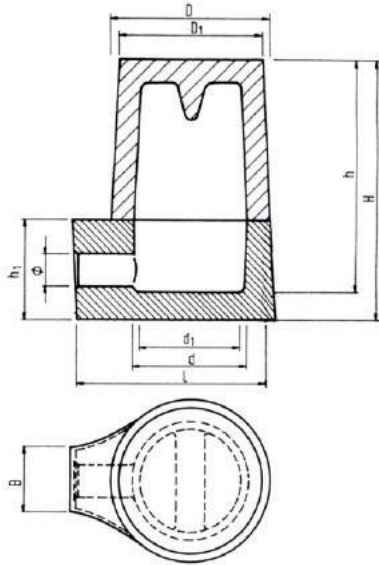


## Yanal Besleyiciler EK-SF Serisi

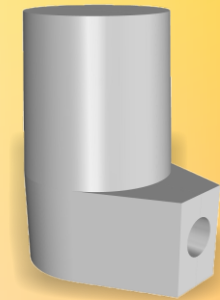
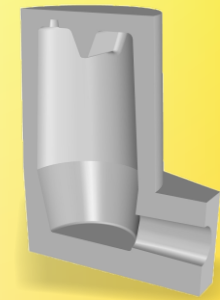
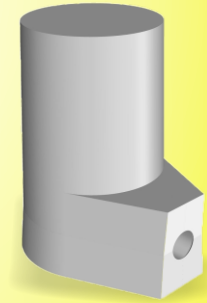
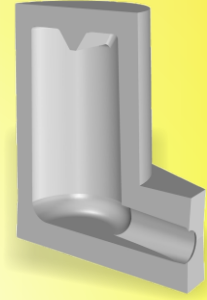


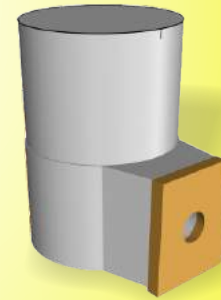
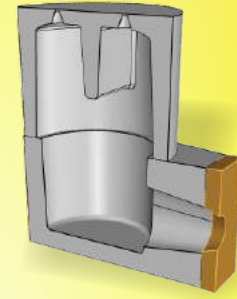
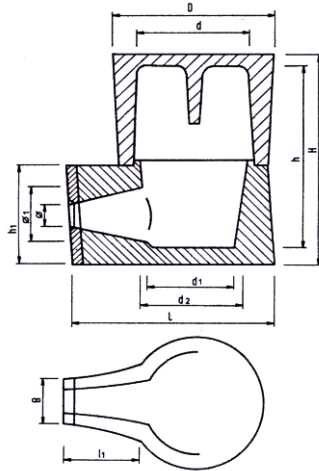
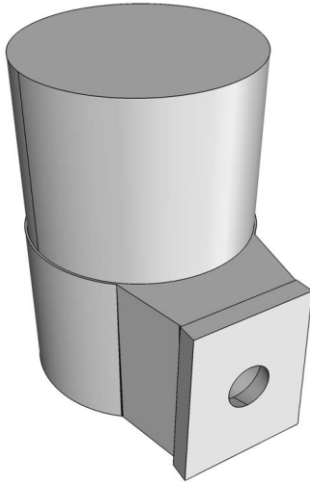
FERRALEX, Exothermic insulating sleeves													
Type	BOYUTLAR												
	H mm	D mm	d mm	h mm	D <sub>1</sub> mm	d <sub>1</sub> mm	L mm	< mm	h <sub>1</sub> mm	B mm	Module cm	V dm <sup>3</sup>	
EK 50/80 SF	128	74	48	1105	68	44	92	14	46	42	1,5	0,16	
EK 60/90 SF	140	82	55	115	76	50	100	18	50	42	1,7	0,24	
EK 70/100W SFI	160	98	72	130	90	64	130	20	60	37	2,1	0,48	

## Yanal Besleyiciler F Serisi

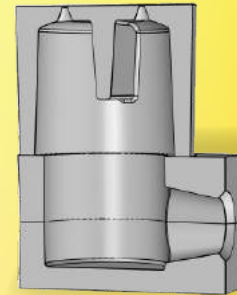
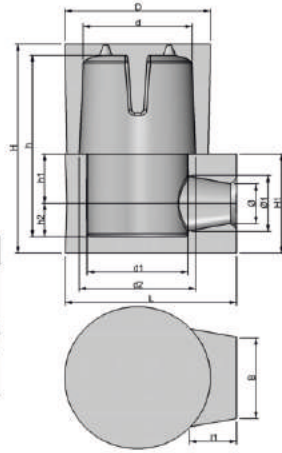
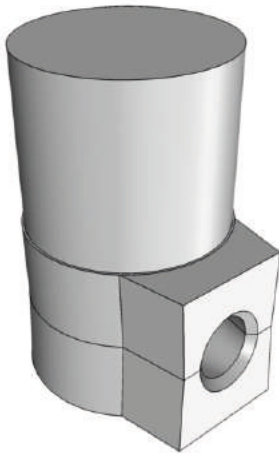


FERRALEX, Exothermic insulating sleeves													
Type	BOYUTLAR												
	H mm	D mm	d mm	h mm	D <sub>1</sub> mm	d <sub>1</sub> mm	L mm	< mm	h <sub>1</sub> mm	B mm	Module cm	V dm <sup>3</sup>	
F 7/10 W	155	93,5	71	125	88,5	67	116	18	55	35	2,1	0,44	
F 9/12 W	194	115,5	90	159	110	81	158	24	72	50	2,6	0,92	
F 10/13 W	200	127	100	165	119,5	94	145	20	70	50	2,9	1,22	
F 12/15/25 W	217,5	157	120	184	147,5	110	196	25	75	55	3,5	1,94	
F 12/15/35 W	217,5	157	120	184	147,5	110	196	35	75	55	3,5	1,99	
F 12/20/25 W	275	157	121	236	145	110	196	25	75	55	3,6	2,49	
F 12/20/35 W	275	157	121	236	145	110	196	35	75	55	3,6	2,54	





FERRAL, Exothermic insulating side sleeves																
Type	BOYUTLAR														Module cm	V dm <sup>3</sup>
	H mm	D mm	L mm	B mm	h <sub>1</sub> mm	< mm	<< mm	l <sub>1</sub> mm	d mm	d <sub>1</sub> mm	d <sub>2</sub> mm	h mm				
F 150 B1 + K 150 T	320	193	280	117	119	45	70	120	55	126	134	275	5,0	4,5		
F 150 B2 + K 150 T	320	193	280	117	119	60	70	120	55	126	134	275	5,0	4,5		
F 200 B1 + K 200 T	385	258	330	148	185	50	98	115	192	178	183	330	6,5	9,4		



FERRALEX, Exothermic -insulating side sleeves																
Typ	BOYUTLAR														Module cm	V dm <sup>3</sup>
	H mm	D mm	L mm	B mm	h <sub>1</sub> mm	h <sub>2</sub> mm	< mm	<< mm	l <sub>1</sub> mm	d mm	d <sub>1</sub> mm	d <sub>2</sub> mm	h mm	H <sub>1</sub> mm		
F 200 + K 200 T	380	258	303	148	90	60	70	102	83	192	178	206	330	180	6,5	9,2

# Isı Bizim Kontrolümüzde





# MINİ BESLEYİCİ MINİ RISER

YÜKSEK EKSO TERMİK / HIGH EXOTHERMIC

Nokta besleme yapmak için geliştirilen bu ürün, sahip olduğu gelişmiş eksotermik özellikleri ile ince kesitli bölgelerde ve besleyici yerleştirme alanı küçük olan bölgelerde kullanılabilir. Yüksek basınçlı kalıplama hatlarında dahi yüksek dayanımı sayesinde kırılmadan kalıp içerisine istenildiği gibi yerleştirilebilir. Üretiminde kullanılan inorganik bağlayıcı, gaz çıkışının az olmasını sağlar.

UMR tipi mini besleyiciler havalık açılması için tasarlanmış olup, UMR (S) tipi mini besleyiciler ise pim üzerinde kendi kendini merkezleyen bir iç tasarıma sahiptir.

Kırıcımaçalar kaplanmış kumdan, inorganik bağlayıcı ile yapılmış kumdan ve eksotermik formülasyondan üretilmektedir. Geleneksel olarak kullanılan kaplanmış kumdan daha yüksek boyutsal hassasiyet sunan inorganik bağlayıcı ile üretilen kırıcı maçalar çentik etkisini arttırmaktadır. Beslemenin zor olduğu ve besleme boğazının çabuk donduğu kısımlarda ise eksotermik kırıcı maçalar kullanılmaktadır.

A feeding aid used with areas that have fast solidification times, or for spot feeding. Even with modern very high pressure molding lines, mini risers can stay intact during moulding and casting. With the aid of a non-organic binder used in production, a minimum amount of gas is evolved from the riser.

UMR type risers are designed to have a preformed degassing hole on top and UMR-S type risers are self centering types when used with appropriate pins.

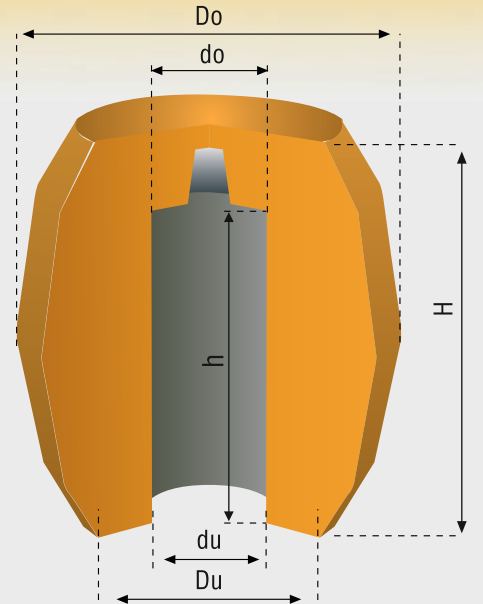
Breaker cores can be produced with sand using organic or inorganic binders, or exothermic material. Inorganic binders have higher dimensional accuracy and better notch effect which decreases the force for knock out. For spot feeding exothermic breaker cores can also be supplied.



# MİNİ BESLEYİCİ MINI RISER

UMR ve UMR (S) SERİSİ / UMR and UMR (S) SERIES

	Tip / Type	Modül Modulus (cm)	Boyutlar / Dimensions (mm)						Hacim Volume cm <sup>3</sup>
			du	do	DU	DO	h	H	
UMR (S)	UMR (S) 350	1,25	27	26	56	62	74	87	35
	UMR (S) 380	1,10	25	23	42	78	81	100	36
	UMR (S) 530	1,35	32	28	68	89	74	92	53
	UMR (S) 780	1,70	36	32	60	88	99	110	80
	UMR (S) 820	1,70	36	32	60	88	101	110	82
	UMR (S) 1090	1,90	40	36	82	106	120	130	130
	UMR (S) 1210	1,90	41	35	80	102	118	132	121
	UMR (S) 1330	2,20	50	40	82	116	102	122	160
	UMR (S) 1340	2,10	50	40	82	91	96	106	134
	UMR (S) 3840	2,40	60	50	110	148	174	202	384
UMR	UMR 80	0,75	16	13	30	50	50	59	8
	UMR 140	0,85	21	19	40	58	50	62	14
	UMR 220	1,20	21	18	41	66	70	85	22
	UMR 270	0,95	25	20	42	60	70	80	27
	UMR 360	1,30	25	23	55	78	81	98	36
	UMR 380	1,30	25	23	42	78	85	100	38
	UMR 560	1,40	32	28	60	88	80	98	56
	UMR 880	1,70	36	32	60	88	97	115	88
	UMR 1590	2,20	50	40	80	115	102	115	159
	UMR 1910	2,30	50	40	85	133	120	141	191
	UMR 2550	2,10	45	40	85	142	180	205	255
	UMR 2640	2,60	60	56	85	133	100	127	264
	UMR 2670	2,70	65	60	100	121	90	115	267
	UMR 24700	5,20	110	100	180	285	285	365	2470



UMR(S) tipi ürünler pim üzerinde kendini merkezleyen tiplerdir. / UMR(S) types are self centering types.





## BESLEYİCİ GÖMLEKLER FEEDER SLEEVES

USS - USO - USN - USB - UBO - UBT - UTC - UKB

Dökümde en yüksek performansı elde edebilmek için üretilen UNIKON besleyici gömlekleri dökümhanelerin ihtiyaçlarına göre çeşitli şekil ve formülasyonlarda üretilebilmektedir.

Kullanılan tüm formülasyonların ortak özelliği yüksek izolasyon özelliklerine sahip olmalarıdır. Farklılıkları ise sahip oldukları eksotermik özelliklerdir.

**UNIZ:** İzolasyon karakterli besleyici gömlekler çok büyük çapa sahip besleyicilerde veya doğrudan parça üzerine yerleştirilen ve grafit yapısının bozulma riskinin bulunduğu küresel grafitli dökme demirlerde kullanılabilir.

Alüminyum dökümlerde de yüksek boy / çap oranına sahip besleyiciler yaratmak için kullanılabilir.

**UNES:** Orta eksotermik karakterli besleyici gömlekler, yüksek eksotermik özelliğe ihtiyaç duyulmayan ancak izolasyon özelliğinin sağladığı besleme performansının artırılmak istendiği durumlarda kullanılır.

**UNEX:** Yüksek eksotermik karakterli, katılma süresi kısa besleyiciler için kullanılır.

Küçük gömleklerde dış kısım düz ve serttir, büyük gömleklerde ise dış kısım hem gömleğin izolasyon özelliklerini geliştirildiği, hem de kalıplama sonrası kalıptan kayma ve döküm esnasında yüzmesini engellediği için özellikle pütürlü olarak üretilmiştir.

UNIKON feeder sleeves are produced with different physical properties and preformed shapes to achieve highest performance in the casting according to the needs of foundries.

All feeder sleeve types have high insulation properties as common features, but different exothermic properties are used in order to achieve the highest performance while casting different alloys.

**UNIZ:** Feeders with only insulating characteristics are used with sleeves having large diameters. Also non-exothermic feeder sleeves are used on SGI castings where the sleeves are used with a top feeder and there is a possibility and the risk of deterioration of the graphite structure.

**UNES:** Mild exothermic sleeves are used where high exothermic property is not necessary for feeders that have long solidification times, thus instead of the exothermic properties, increased insulation properties are used to increase the feeding performance.

**UNEX:** High exothermic feeder sleeves, used for small modulus feeders. It shows high toughness and superior dimensional accuracy especially for insert applications.

With blind sleeves the outer layer is hard and have very high dimensional accuracy. The open sleeves on the other hand, have a especially designed outer layer which has a very rough surface which prevents the sleeve from floating during casting and moving into the cast part while solidification takes place.

	Yoğunluk / Specific Gravity (gr/cm <sup>3</sup> )	Tutuşma Süresi / Ignition Time (sn) / (sec)	Yanma Süresi / Reaction Time (sn) / (sec)
<b>UNIZ</b>	0,45	-	-
<b>UNES</b>	0,50	10 - 180	> 180
<b>UNEX</b>	0,65	10 - 95	> 180

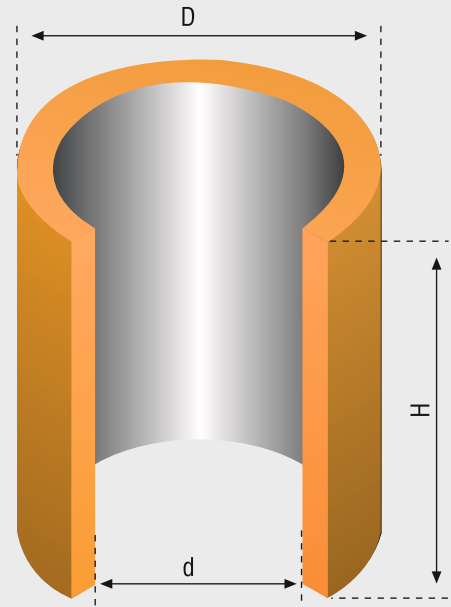


Tip / Type	Modül Modulus (cm)		Boyutlar Dimensions (mm)			Hacim Volume dm <sup>3</sup>	Adetler Packing	
	BG	Geom	d	D	H		Kutu Box	Palet Pallet
USS 1	1,60	1,00	40	63	71	0,1	448	3584
USS 2	2,10	1,50	60	85	160	0,4	108	864
USS 3	2,40	1,60	80	110	150	0,7	60	630
USS 4	2,80	1,85	100	140	150	0,9	36	343
USS 5	3,20	2,15	120	160	150	1,7	27	252
USS 6	3,90	2,60	140	180	200	3,1	12	150
USS 6/300	4,10	2,85	140	180	300	4,7	6	90
USS 7	4,30	2,85	160	205	200	4,0	10	125
USS 7/300	4,60	3,15	160	205	300	6,0	5	75
USS 8	4,70	3,10	180	230	200	5,1	8	80
USS 8/300	5,00	3,40	180	230	300	7,7	4	48
USS 9	4,80	3,30	200	250	200	6,3	8	80
USS 9/300	5,40	3,70	200	250	300	9,4	4	48
USS 10	5,70	4,00	250	305	200	9,8	4	45
USS 10/300	6,40	4,40	250	305	300	14,7	2	27
USS 11	6,20	4,30	300	360	200	14,2	2	36
USS 11/300	7,30	5,00	300	360	300	21,2	1	15
USS 12	6,70	4,70	350	415	200	19,3	2	25
USS 12/300	8,10	5,60	350	415	300	28,8	1	15
USS 13	6,90	5,00	400	165	200	25,2	2	20
USS 14	7,40	5,30	450	515	200	32,0	2	20
USS 15	7,80	5,60	500	565	200	40,0	-	15
USS 16	8,10	5,80	550	630	200	47,5	-	10
USS 17	8,40	6,00	595	695	200	55,5	-	5
USS 18	8,40	6,20	650	722	200	66,4	-	5
USS 19	8,60	6,40	700	774	200	77,0	-	5
USS 20	8,80	6,50	750	826	200	88,4	-	5
USS 21	9,00	6,70	800	880	200	100,6	-	5
USS 22	9,20	6,80	850	930	200	113,5	-	5
USS 23	9,40	6,90	900	984	200	127,2	-	5

# USS SERİSİ

## USS SERIES

AÇIK SİLİNDİRİK / OPEN CYLINDRICAL



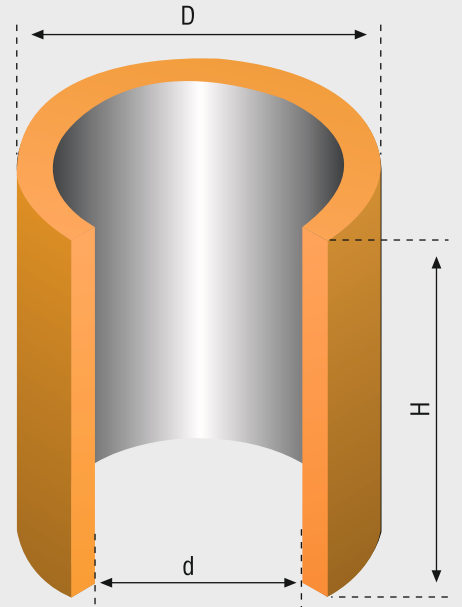


# USS-I SERİSİ

## USS-I SERIES

AÇIK SİLİNDİRİK / OPEN CYLINDRICAL

Tip / Type	Modül Modulus (cm)		Boyutlar Dimensions (mm)			Hacim Volume dm <sup>3</sup>	Adetler Packing	
	BG	Geom	d	D	H		Kutu Box	Palet Pallet
USS-I 3	2,5	1,7	80	105	200	1,0	50	500
USS-I 3/300	2,6	1,8	80	105	300	1,5	25	400
USS-I 4	3,0	2,0	102	125	200	1,6	32	320
USS-I 4/300	3,3	2,2	102	125	300	2,5	16	256
USS-I 5	3,6	2,4	127	152	200	2,5	18	210
USS-I 5/300	3,9	2,6	127	152	300	3,8	9	168
USS-I 6	4,3	2,9	160	185	200	4,0	12	150
USS-I 6/300	4,7	3,2	160	185	300	6,0	6	120
USS-I 7	4,7	3,1	180	218	200	5,1	8	100
USS-I 7/300	5,2	3,5	180	218	300	7,6	4	80
USS-I 8	5,1	3,4	205	243	200	6,6	8	80
USS-I 8/300	5,7	3,8	205	243	300	9,9	4	64
USS-I 9	5,5	3,7	230	280	200	8,3	4	60
USS-I 9/300	6,3	4,2	230	280	300	12,5	2	48
USS-I 10	5,8	3,9	254	304	200	10,1	4	60
USS-I 10/300	6,8	4,5	254	304	300	15,2	2	48
USS-I 11	6,2	4,1	280	330	200	12,3	4	45
USS-I 11/300	7,2	4,8	280	330	300	18,5	2	36
USS-I 12	6,5	4,3	305	355	200	14,6	2	45
USS-I 12/300	7,6	5,1	305	355	300	21,9	1	36
USS-I 14	7,1	4,7	356	432	200	19,9	2	20
USS-I 14/300	8,4	5,6	356	432	300	29,8	1	12



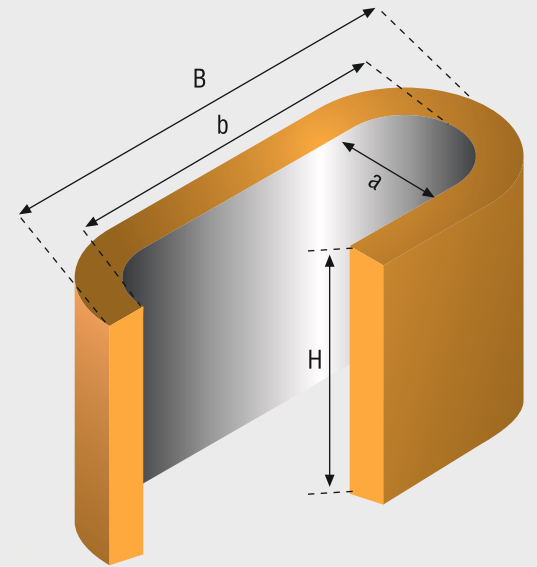


Tip / Type	Modül Modulus (cm)		Boyutlar Dimensions (mm)				Hacim Volume dm <sup>3</sup>	Adetler Packing	
	BG	Geom	a	b	B	H		Kutu Box	Palet Pallet
USO 4	2,60	1,80	60	144	174	150	1,2	45	420
USO 5	3,00	2,15	80	160	200	150	1,7	30	280
USO 6	3,90	2,80	100	200	240	200	3,6	14	140
USO 6/300	4,20	2,90	100	200	240	300	5,3	7	84
USO 7	4,30	3,20	120	240	284	200	5,1	10	105
USO 7/300	4,80	3,40	120	240	284	300	7,7	5	63
USO 8	4,80	3,70	140	280	328	200	7,0	8	75
USO 8/300	5,50	3,90	140	280	328	300	10,5	4	45
USO 9	5,20	4,00	160	320	372	200	9,1	6	65
USO 9/300	5,80	4,30	160	320	372	300	13,7	3	39
USO 10	5,50	4,40	180	360	416	200	11,5	4	55
USO 10/300	6,40	4,70	180	360	416	300	17,3	2	33
USO 11	6,10	4,70	200	400	460	200	14,2	4	40
USO 11/300	6,80	5,10	200	400	460	300	21,4	2	24
USO 12	6,60	5,20	230	455	521	200	18,6	2	30
USO 12/300	7,50	5,60	230	455	521	300	28,0		18
USO 13	6,20	5,50	250	495	559	200	22,0		25
USO 13/300	7,90	6,00	250	495	559	300	33,1		15
USO 14	8,10	6,10	300	600	659	200	32,1		20
USO 14/300	8,80	6,80	300	600	659	300	48,2		12
USO 27	6,20	4,30	270	330	465	200	14,7		30
USO 30	6,50	4,50	300	364	514	200	18,0		20

# USO SERİSİ

## USO SERIES

AÇIK OVAL / OPEN OVAL



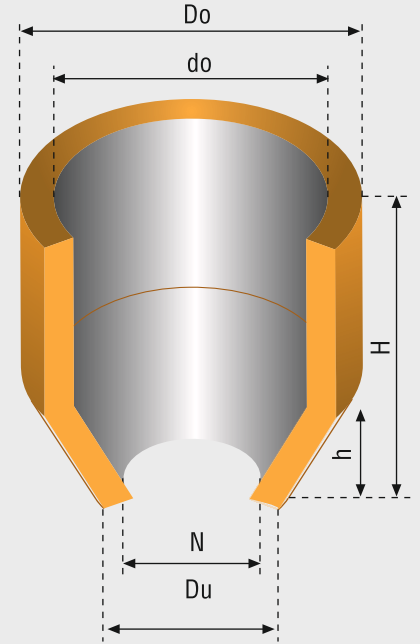


# USN SERİSİ

## USN SERIES

AÇIK KONİK / OPEN NECKDOWN

Tip / Type	Modül Modulus (cm)		Boyutlar Dimensions (mm)						Hacim Volume dm <sup>3</sup>	Adetler Packing	
	BG	Geom	N	Du	do	Do	h	H		Kutu Box	Palet Pallet
USN 0	1,5	1,0	30	55	50	75	15	100	0,19	180	1950
USN 1	2,1	1,4	38	69	78	100	27	100	0,42	125	1100
USN 2	2,2	1,5	45	74	85	114	34	100	0,49	80	800
USN 3	2,7	1,8	48	76	94	130	43	150	0,92	48	378
USN 4	3,1	2,1	60	97	118	157	50	150	1,41	27	252
USN 5	4,0	2,6	70	120	147	192	68	195	2,8	8	150
USN 6	4,8	3,2	87	132	175	222	90	250	5,1	8	80
USN 7	5,2	3,5	100	150	200	250	100	250	6,5	8	64
USN 8	5,6	3,8	110	160	225	278	110	250	8,1	4	48
USN 9	6,5	4,3	124	180	252	310	120	300	12,4	2	27
USN 10	6,7	4,5	150	210	300	360	140	300	17,1	2	18
USN 11	7,9	5,3	175	240	355	410	155	300	23,2	1	12
USN 15	6,4	4,6	380	470	500	580	100	150	8,8	-	24



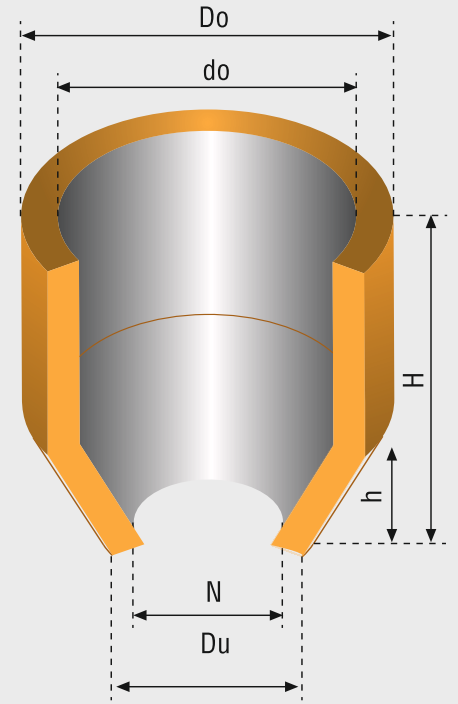


# USN-I SERİSİ

## USN-I SERIES

AÇIK KONİK / OPEN NECKDOWN

Tip / Type	Modül Modulus (cm)		Boyutlar Dimensions (mm)						Hacim Volume dm <sup>3</sup>
	BG	Geom	N	Du	do	Do	h	H	
USN-I 2/100	1,7	1,1	26	45	51	70	26	100	0,3
USN-I 2	1,8	1,2	26	45	51	70	26	150	0,4
USN-I 3	2,3	1,5	36	64	76	102	38	200	0,8
USN-I 3/300	2,6	1,7	36	64	76	102	38	300	1,3
USN-I 4	3,2	2,1	48	76	102	127	51	200	1,5
USN-I 4/300	3,3	2,2	48	76	102	127	51	300	2,3
USN-I 5	3,6	2,4	61	89	127	153	64	200	2,2
USN-I 5/300	3,9	2,6	61	89	127	153	64	300	3,4
USN-I 6	4,1	2,7	74	102	153	178	76	200	3,1
USN-I 6/300	4,5	3,0	74	102	153	178	76	300	4,9
USN-I 7	4,5	3,0	86	127	178	216	89	200	4,0
USN-I 7/300	5,1	3,4	86	127	178	216	89	300	6,5
USN-I 8	4,8	3,2	99	140	204	242	102	200	5,1
USN-I 8/300	5,7	3,8	99	140	204	242	102	300	8,4
USN-I 9	5,1	3,4	112	153	229	267	111	200	6,3
USN-I 9/300	6,2	4,1	112	153	229	267	111	300	10,4
USN-I 10	5,4	3,6	125	178	254	305	127	200	7,4
USN-I 10/300	6,5	4,3	125	178	254	305	127	300	12,5
USN-I 12	5,7	3,8	150	203	305	356	152	200	9,9
USN-I 12/300	7,2	4,8	150	203	305	356	152	300	17,2



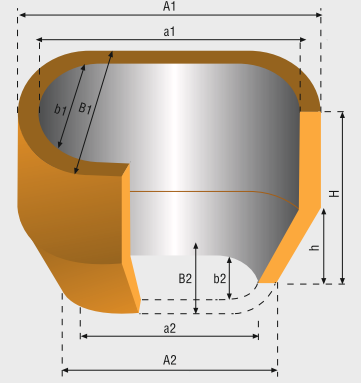


# UNO SERİSİ

## UNO SERIES

AÇIK OVAL KONİK / OPEN OVAL NECKDOWN

Tip / Type	Modül Modulus (cm)		Boyutlar Dimensions (mm)										Hacim Volume dm <sup>3</sup>	Adetler Packing	
	BG	Geom	a1	A1	b1	B1	a2	A2	b2	B2	h	H		Kutu Box	Palet Pallet
UNO 3/115	2,10	1,40	124	148	64	88	60	84	30	54	38	115	0,65	60	490
UNO 4/150	2,70	1,80	155	180	80	105	75	100	38	63	51	150	1,35	39	300
UNO 5/190	3,40	2,30	195	223	100	128	95	123	48	76	64	190	2,70	16	180
UNO 6/230	4,10	2,80	236	268	121	153	115	147	58	90	75	230	4,80	12	92
UNO 7/250	4,70	3,10	277	313	142	178	135	171	68	104	90	250	7,00	10	60
UNO 8/260	5,10	3,40	308	348	158	198	150	190	75	115	100	260	9,00	8	52





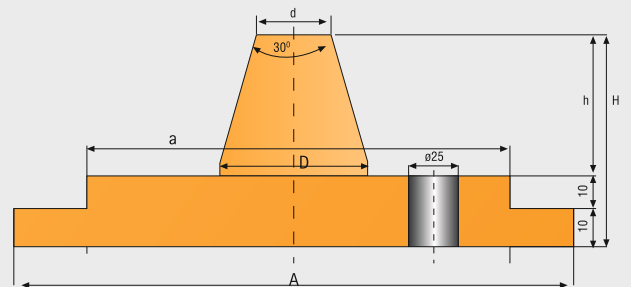
Tip / Type	Boyutlar / Dimensions (mm)							
	a	A	b	B	d	D	h	H
UTC O-4	58	90	142	174	20	45	30	50
UTC O-5	78	120	158	200	20	45	30	50
UTC O-6	98	140	198	240	20	45	30	50
UTC O-7	118	164	238	284	20	45	30	50
UTC O-8	138	188	278	328	20	45	30	50
UTC O-9	158	212	318	372	20	45	30	50
UTC O-10	178	236	358	416	20	45	30	50
UTC O-11	198	260	460	460	20	45	30	50

# UTC SERİSİ

## UTC SERIES

İZOLASYON KAPAKLARI  
INSULATING TOP COVERS

Tip / Type	Boyutlar / Dimensions (mm)						
	a	A	d	D	h	H	
UTC N-1	100	100	3	22	22	32	
UTC N-2	114	114	3	24	24	34	
UTC 3	78	110	9	20	20	40	
UTC 4	98	140	12	25	25	45	
UTC 5	118	160	14	30	30	50	
UTC 6	138	180	16	35	35	55	
UTC 7	158	205	18	40	40	60	
UTC 8	178	230	21	45	45	65	
UTC 9	198	250	23	50	50	70	
UTC 10	248	305	29	62	63	83	
UTC 11	298	360	35	75	75	95	
UTC 12	348	415	41	90	90	110	
UTC 13	398	465	46	100	100	120	



UTC serisi USS, UTC N serisi USN, UTC O serisi USO tipleri içindir. / UTC series is for USS, UTC N series is for USN, UTC O series is for USO types.





# UKB SERİSİ

## UKB SERIES

### KATLANABİLİR İZOLASYON LEVHALARI

### FLEXIBLE INSULATING BOARDS

Her parça 8 adet segmentten oluşmuş olup daire ve oval şekiller alması için özel tasarlanmıştır. UKB uzunlukları basit bir şekilde birbirine eklenerek veya kesilerek ayarlanabilir. Yükseklik için ise UKB yine aynı şekilde kesilerek veya birleştirilerek kullanılabilir.

Daha düşük nakliye maliyeti için UKB izolasyon malzemeleri, büyük çaplı besleyici gömlekler yerine, düz ve sıralı olarak dizilerek sevk edilir ve stoklanır.

UKB, çok yüksek module sahip besleyicilerin, uzun süre sıvı kalarak daha iyi performans göstermesi için, yüksek izolasyon özelliklerine sahip malzemelerden üretilmiştir.

Each piece is formed by 8 segments which is designed to bend and form either a cylinder or an oval. Each piece of UKB can be added to another piece, cut down to fit the diameter or the height of the required feeder.

For lower transport and storage costs UKB insulating boards are packed, stored and shipped as straight instead of the preshaped feeder sleeves.

Because of the high modulus numbers of the feeders used, UKB produced from a material that has very high insulating properties which can also prevent metal penetration.

	Boyutlar / Dimensions (mm)		
	Uzunluk / Length	Yükseklik / Height	Genişlik / Width
UKB F-16	400	60	78,5

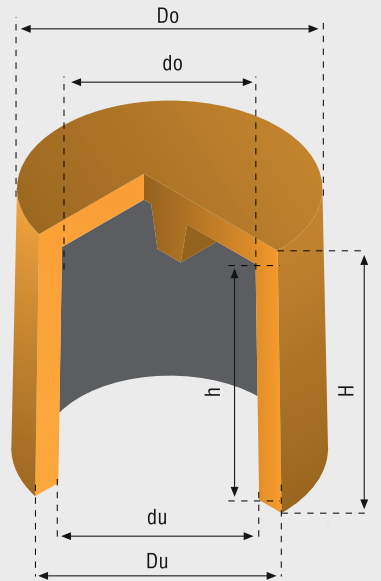


# USB SERİSİ

## USB SERIES

KAPALI SİLİNDİRİK / CLOSED CYLINDRICAL

Tip / Type	Modül Modulus (cm)		Boyutlar Dimensions (mm)						Hacim Volume dm <sup>3</sup>	Adetler Packing	
	BG	Geom	do	Do	du	Du	h	H		Kutu Box	Palet Pallet
USB 3,5/5	1,00	0,60	30,5	49	35	53	63	71	0,03	810	6859
USB 3/9	1,10	0,65	31	44	32	45,5	80	90	0,06	605	4680
USB 4/7	1,20	0,75	35,5	59	41,5	62,5	63	71,5	0,07	384	3584
USB 4/95	1,30	0,80	36	59	42,5	63	85	97	0,10	320	2520
USB 5/8	1,50	0,95	48	70	52	73,5	70	80	0,13	294	1800
USB 6/9	1,70	1,05	52,5	76	57,5	80	78,5	91	0,18	210	1400
USB 6/12	1,80	1,10	52,5	75	57,5	80	105	120	0,26	168	1225
USB 6/13	1,85	1,15	52,5	75	57,5	80	115	130	0,29	126	1152
USB 7/10	2,00	1,25	65	89	69,5	94	87	99	0,33	120	960
USB 8/11	2,25	1,40	71,5	99	79	102	96,5	108	0,42	100	700
USB 8/11 D	2,25	1,40	71,5	101	79	102	96,5	108	0,42	100	840
USB 8/12 D	2,25	1,40	71,5	101	79	102	96,5	120	0,42	100	840
USB 9/12	2,50	1,55	81	110	89	115	104,5	120	0,58	80	525
USB 9/12 D	2,50	1,55	81	114	89	115	104,5	120	0,58	80	567
USB 10/13	2,80	1,75	91	119	97	127,5	117	133	0,80	48	490
USB 10/13 D	2,80	1,75	91	126	97	127,5	117	133	0,80	48	490
USB 11/14	3,00	1,90	100	133	107	140	125	140	1,03	36	343
USB 12/15	3,20	2,00	112	148	118	154,5	130	150	1,35	27	294



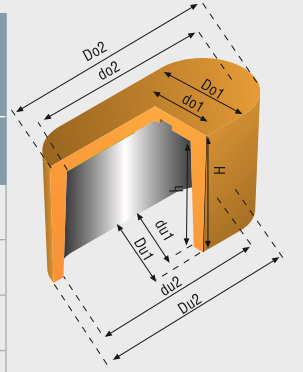


# UBO ve USO SERİSİ

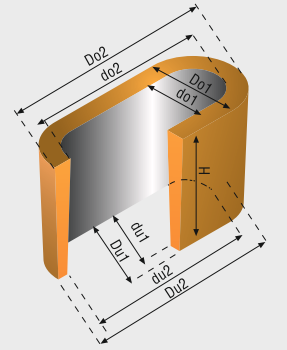
## UBO ve USO SERIES

KAPALI ve AÇIK OVAL / OPEN and CLOSED OVAL

Tip / Type	Modül Modulus (cm)		Boyutlar Dimensions (mm)										Hacim Volume dm <sup>3</sup>	Adetler Packing	
	BG	Geom	du1	du2	do1	do2	Du1	Du2	Do1	Do2	h	H		Kutu Box	Palet Pallet
UBO 5/8	1,75	1,10	51	76	45	70	69	94	74	99	68	80	0,20	330	2640
UBO 6/9	2,10	1,30	61	91	55	85	82	112	88	118	78	90	0,35	180	1440
UBO 7/10	2,40	1,50	72	107	64	99	93	128	100	135	88	100	0,55	120	960
UBO 8/11	2,60	1,65	80	122	72	114	104	146	112	154	98	110	0,80	48	384



Tip / Type	Modül Modulus (cm)		Boyutlar Dimensions (mm)										Hacim Volume dm <sup>3</sup>	Adetler Packing	
	BG	Geom	du1	du2	do1	do2	Du1	Du2	Do1	Do2	H	Kutu Box		Palet Pallet	
USO 5/8	1,80	1,10	51	76	45	70	69	94	74	99	80	0,25	330	2640	
USO 6/9	2,10	1,30	61	91	55	85	82	112	88	118	90	0,40	180	1440	
USO 7/10	2,40	1,50	72	107	64	99	93	128	100	135	100	0,62	120	960	
USO 8/11	2,70	1,70	80	122	72	114	104	146	112	154	110	0,87	48	384	



- UBO (W) serisi ürünlerin, iç kısımlarında Williams girintileri bulunmaktadır.- UBO (W) series sleeves have Williams wedges.



## UBT ve USS SERİSİ

### UBT ve USS SERIES

KAPALI ve AÇIK SİLİNDİRİK / OPEN and CLOSED CYLINDRICAL

Tip / Type	Modül Modulus (cm)		Boyutlar Dimensions (mm)						Hacim Volume dm <sup>3</sup>	Adetler Packing	
	BG	Geom	du	DU	do	Do	h	H		Kutu Box	Palet Pallet
UBT 3,5/5	0,95	0,60	35	43	30,5	47	39,5	47,5	0,03	1210	9680
UBT 4/7	1,20	0,75	41	57,5	35,5	63	63	71,5	0,07	448	3584
UBT 4/95	1,30	0,80	42	58	36	63,5	87	97	0,10	320	2560
UBT 5/8	1,50	0,95	51,5	68	47,5	73	71	81,5	0,13	294	2352
UBT 6/9	1,70	1,05	57,5	74,5	52	79,5	79	92	0,18	180	1440
UBT 7/10	2,00	1,25	69	88	65	94,5	88	100	0,31	125	1000
UBT 8/11	2,25	1,40	78	97,5	71	103,5	95	108	0,42	100	800
UBT 9/12	2,50	1,55	89	108,5	82,5	116	105	120,5	0,61	64	512
UBT 10/13	2,80	1,75	97	118	91,5	128	114	130,5	0,80	48	384

Tip / Type	Modül Modulus (cm)		Boyutlar Dimensions (mm)					Hacim Volume dm <sup>3</sup>	Adetler Packing	
	BG	Geom	du	DU	do	Do	H		Kutu Box	Palet Pallet
USS 5/8	1,50	0,95	51	68,5	47	74,5	80	0,15	294	1575
USS 6/9	1,70	1,05	57	74	51	80	91	0,21	210	1280
USS 7/10	2,00	1,25	69	87,5	64	98	101	0,35	150	960
USS 8/11	2,25	1,40	77,5	97,5	70	104	108	0,46	100	700
USS 9/12	2,50	1,55	88	107,5	80	116	119	0,66	80	490
USS 10/13	2,80	1,75	97	118,5	89	128	131	0,89	48	420

