

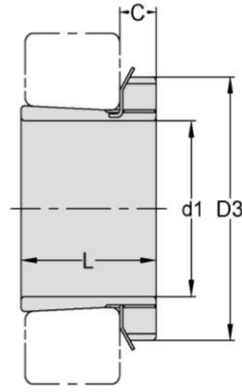


# BEARING SLEEVES



## Adapter Sleeves

H 2  
HE 2  
HS 2  
HA 2



TAPER 1:12

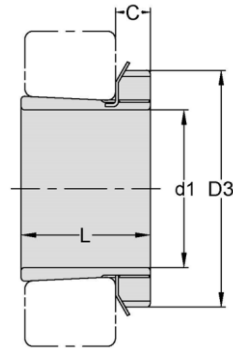
Adapter Sleeve NO.	d1				L mm	D3 mm	C mm	Lock Nut	Lock Washer	Weight kg
	H mm	HE in	HS in	HA in						
H204	17	-	-	-	24	32	7	AN04	AW04	0.041
H205	20	3/4	7/8	13/16	26	38	8	AN05	AW05	0.07
H206	25	1	7/8	15/16	27	45	8	AN06	AW06	0.099
H207	30	1 1/4	1 1/8	1 3/16	29	52	9	AN07	AW07	0.125
H208	35	1 1/4	1 3/8	1 5/16	31	58	10	AN08	AW08	0.174
H209	40	1 1/2	1 5/8	1 7/16	33	65	11	AN09	AW09	0.227
H210	45	1 3/4	1 5/8	1 11/16	35	70	12	AN10	AW10	0.274
H211	50	2	1 7/8	1 15/16	37	75	12	AN11	AW11	0.308
H212	55	2 1/4	2 1/8	2 1/16	38	80	13	AN12	AW12	0.346
H213	60	2 1/4	2 3/8	2 3/16	40	85	14	AN13	AW13	0.401
H214	60	2 1/4	-	2 5/16	41	92	14	AN14	AW14	0.593
H215	65	2 1/2	2 5/8	2 7/16	43	98	15	AN15	AW15	0.707
H216	70	2 3/4	2 7/8	2 11/16	46	105	17	AN16	AW16	0.882
H217	75	3	-	2 15/16	50	110	18	AN17	AW17	1.02
H218	80	3 1/4	3 1/8	3 3/16	52	120	18	AN18	AW18	1.19
H219	85	3 1/4	-	3 5/16	55	125	19	AN19	AW19	1.37
H220	90	3 1/2	-	3 7/16	58	130	20	AN20	AW20	1.49
H221	95	-	-	-	60	140	20	AN21	AW21	1.72
H222	100	4	-	3 15/16	63	145	21	AN22	AW22	1.93

CS adapter sleeves are supplied completely with lock nuts and lock washers.

Adapter for these bores are designated HE/HS/HA.

## Adapter Sleeves

**H 3**  
**HE 3**  
**HS 3**  
**HA 3**



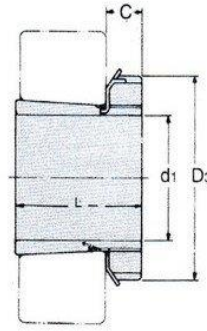
TAPER 1:12

Adapter Sleeve NO.	d1				L mm	D3 mm	C mm	Lock Nut	Lock Washer	Weight kg
	H mm	HE in	HS in	HA in						
H304	17	-	-	-	28	32	7	AN04	AW04	0.045
H305	20	3/4	7/8	-	29	38	8	AN05	AW05	0.075
H306	25	1	7/8	15/16	31	45	8	AN06	AW06	0.109
H307	30	1 1/4	1 1/8	1 3/16	35	52	9	AN07	AW07	0.142
H308	35	1 1/4	1 3/8	1 5/16	36	58	10	AN08	AW08	0.189
H309	40	1 1/2	1 5/8	1 7/16	39	65	11	AN09	AW09	0.248
H310	45	1 3/4	1 5/8	1 11/16	42	70	12	AN10	AW10	0.303
H311	50	2	1 7/8	1 15/16	45	75	12	AN11	AW11	0.345
H312	55	2 1/4	2 1/8	2 1/16	47	80	13	AN12	AW12	0.394
H313	60	2 1/4	2 3/8	2 3/16	50	85	14	AN13	AW13	0.458
H314	60	2 1/4	-	-	52	92	14	AN14	AW14	0.723
H315	65	2 1/2	2 5/8	2 7/16	55	98	15	AN15	AW15	0.831
H316	70	2 3/4	2 7/8	2 11/16	59	105	17	AN16	AW16	1.03
H317	75	3	-	2 15/16	63	110	18	AN17	AW17	1.18
H318	80	3 1/4	3 1/8	3 3/16	65	120	18	AN18	AW18	1.37
H319	85	3 1/4	-	3 5/16	68	125	19	AN19	AW19	1.56
H320	90	3 1/2	-	3 7/16	71	130	20	AN20	AW20	1.69
H321	95	-	-	-	74	140	20	AN21	AW21	1.95
H322	100	4	-	3 15/16	77	145	21	AN22	AW22	2.18

CS adapter sleeves are supplied completely with lock nuts and lock washers.

Adapter for these bores are designated HE/HS/HA

## Adapter Sleeves



H 23  
HE 23  
HS 23  
HA 23

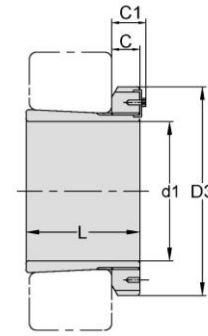
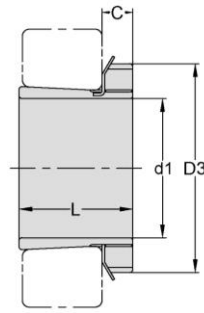
TAPER 1:12

Adapter Sleeve NO.	d1				L mm	D3 mm	C mm	Lock Nut	Lock Washer	Weight kg
	H mm	HE in	HS in	HA in						
H2304	17	-	-	-	31	32	7	AN04	AW04	0.049
H2305	20	3/4	7/8	13/16	35	38	8	AN05	AW05	0.087
H2306	25	1	7/8	15/16	38	45	8	AN06	AW06	0.126
H2307	30	1 1/4	1 1/8	1 3/16	43	52	9	AN07	AW07	0.165
H2308	35	1 1/4	1 3/8	1 5/16	46	58	10	AN08	AW08	0.224
H2309	40	1 1/2	1 5/8	1 7/16	50	65	11	AN09	AW09	0.28
H2310	45	1 3/4	1 5/8	1 11/16	55	70	12	AN10	AW10	0.362
H2311	50	2	1 7/8	1 15/16	59	75	12	AN11	AW11	0.42
H2312	55	2 1/4	2 1/8	2 1/16	62	80	13	AN12	AW12	0.481
H2313	60	2 1/4	2 3/8	2 3/16	65	85	14	AN13	AW13	0.557
H2314	60	2 1/4	-	-	68	92	14	AN14	AW14	0.897
H2315	65	2 1/2	2 5/8	2 7/16	73	98	15	AN15	AW15	1.05
H2316	70	2 3/4	2 7/8	2 11/16	78	105	17	AN16	AW16	1.28
H2317	75	3	-	2 15/16	82	110	18	AN17	AW17	1.45
H2318	80	3 1/4	3 1/8	3 3/16	86	120	18	AN18	AW18	1.69
H2319	85	3 1/4	-	3 5/16	90	125	19	AN19	AW19	1.92
H2320	90	3 1/2	-	3 7/16	97	130	20	AN20	AW20	2.15
H2321	95	-	-	-	101	140	20	AN21	AW21	2.46
H2322	100	4	-	3 15/16	105	145	21	AN22	AW22	2.74
H2324	110	4 1/4	-	4 3/16	112	155	22	AN24	AW24	3.19
H2326	115	4 1/2	-	4 7/16	121	165	23	AN26	AW26	4.6
H2328	125	5	4 13/16	4 15/16	131	180	24	AN28	AW28	5.55
H2330	135	5 1/4	-	5 3/16	139	195	26	AN30	AW30	6.63
H2332	140	5 1/2	-	5 7/16	147	210	28	AN32	AW32	9.14
H2334	150	6	-	5 15/16	154	220	29	AN34	AW34	10.2
H2336	160	6 1/2	-	6 7/16	161	230	30	AN36	AW36	11.3
H2338	170	6 3/4	-	6 15/16	169	240	31	AN38	AW38	12.6
H2340	180	7	-	7 3/16	176	250	32	AN40	AW40	13.9
H2344	200	8	7 7/8	7 15/16	183	280	32	AN44	AL44	16.7
H2348	220	8 1/2	-	8 15/16	196	300	34	AN48	AL48	19.7
H2352	240	9 1/2	-	9 7/16	208	330	36	AN52	AL52	24.2
H2356	260	10 1/2	-	9 15/16	221	350	38	AN56	AL56	27.8

CS adapter sleeves are supplied completely with lock nuts and lock washers or plates.  
Adapter for these bores are designated HE/HS/HA.

## Adapter Sleeves

H 30  
HE 30  
HA 30



TAPER 1:12

Adapter Sleeve NO.	d1			L	D3	C	C <sub>1</sub> <sup>4)</sup>	Lock Nut	Lock Washer and Lock plate	Weight
	H mm	HE in	HA in							
H3024	110	4 1/4	4 3/16	72	145	22	-	ANL24	AWL24	1.93
H3026	115	4 1/2	4 7/16	80	155	23	-	ANL26	AWL26	2.85
H3028	125	5	4 15/16	82	165	24	-	ANL28	AWL28	3.16
H3030	135	5 1/4	5 3/16	87	180	26	-	ANL30	AWL30	3.89
H3032	140	5 1/2	5 7/16	93	190	28	-	ANL32	AWL32	5.21
H3034	150	6	5 15/16	101	200	29	-	ANL34	AWL34	5.99
H3036	160	6 1/2	6 7/16	109	210	30	-	ANL36	AWL36	6.83
H3038	170	6 3/4	6 15/16	112	220	31	-	ANL38	AWL38	7.45
H3040	180	7	7 3/16	120	240	32	-	ANL40	AWL40	9.19
H3044	200	8	7 15/16	128	260	30	41	ANL44	ALL44	10.3
H3048	220		8 15/16	133	290	34	46	ANL48	ALL48	13.2
H3052	240	9 1/2	9 7/16	147	310	34	46	ANL52	ALL52	15.3
H3056	260	10 1/2	10 7/16	152	330	38	50	ANL56	ALL56	17.7
H3060	280	-	10 15/16	168	360	42	54	ANL60	ALL60	22.8
H3064	300	12	11 15/16	171	380	42	55	ANL64	ALL64	24.6
H3068	320	12 1/2	12 7/16	187	400	45	58	ANL68	ALL68	28.7
H3072	340	-	13 7/16	188	420	45	58	ANL72	ALL72	30.5
H3076	360	-	13 15/16	193	450	48	62	ANL76	ALL76	35.8
H3080	380	-	-	210	470	52	66	ANL80	ALL80	41.3
H3084	400	-	-	212	490	52	66	ANL84	ALL84	43.7
H3088	410	-	-	228	520	60	77	ANL88	ALL88	65.2
H3092	430	-	-	234	540	60	77	ANL92	ALL92	69.5
H3096	450	-	-	237	560	60	77	ANL96	ALL96	73.3
H30/500	470	-	-	247	580	68	85	ANL100	ALL100	81.8

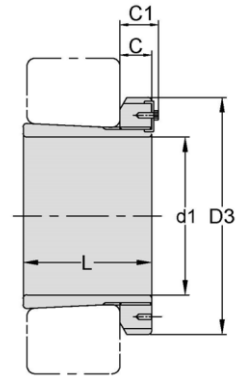
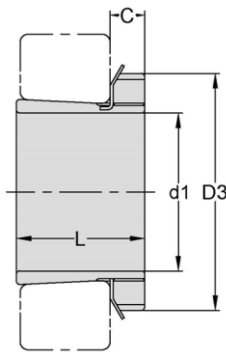
CS adapter sleeves are supplied completely with lock nuts and lock washers or lock plates.

Adapter for these bores are designated HE/HA.

Adapter with the dimension C1 is equipped with a locking device as shown in the right illustration.

## Adapter Sleeves

H 31  
HE 31  
HA 31



TAPER 1:12

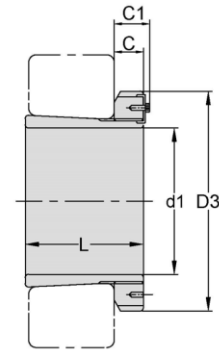
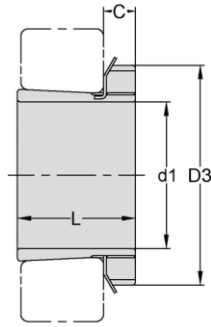
Adapter Sleeve NO.	d1			L mm	D3 mm	C mm	C <sub>1</sub> <sup>4)</sup> mm	Lock Nut	Lock Washer & Lock Plate	Weight kg
	H mm	HE in	HA in							
H3120	90	3 1/2	3 7/16	76	130	20	-	AN20	AW20	1.8
H3122	100	4	3 15/16	81	145	21	-	AN22	AW22	2.25
H3124	110	4 1/4	4 3/16	88	155	22	-	AN24	AW24	2.64
H3126	115	4 1/2	4 7/16	92	165	23	-	AN26	AW26	3.66
H3128	125	5	4 15/16	97	180	24	-	AN28	AW28	4.34
H3130	135	5 1/4	5 3/16	111	195	26	-	AN30	AW30	5.52
H3132	140	5 1/2	5 7/16	119	210	28	-	AN32	AW32	7.67
H3134	150	6	5 15/16	122	220	29	-	AN34	AW34	8.38
H3136	160	6 1/2	6 7/16	131	230	30	-	AN36	AW36	9.5
H3138	170	6 3/4	6 15/16	141	240	31	-	AN38	AW38	10.8
H3140	180	7	7 3/16	150	250	32	-	AN40	AW40	12.1
H3144	200	8	7 15/16	158	280	32	44	AN44	AL44	14.7
H3148	220	8 1/2	-	169	300	34	46	AN48	AL48	17.3
H3152	240	9 1/2	-	187	330	36	49	AN52	AL52	22
H3156	260	10 1/2	-	192	350	38	51	AN56	AL56	24.5
H3160	280	-	-	208	380	40	53	AN60	AL60	30.2
H3164	300	12	-	226	400	42	56	AN64	AL64	34.9
H3168	320	12 1/2	-	254	440	55	72	AN68	AL68	49.5
H3172	340	-	-	259	460	58	75	AN72	AL72	54.2
H3176	360	-	-	264	490	60	77	AN76	AL76	61.7
H3180	380	-	-	272	520	62	82	AN80	AL80	70.6
H3184	400	-	-	304	540	70	90	AN84	AL84	84.2
H3188	410	-	-	307	560	70	90	AN88	AL88	104
H3192	430	-	-	326	580	75	95	AN92	AL92	116
H3196	450	-	-	335	620	75	95	AN96	AL96	133
H31/500	470	-	-	356	630	80	100	AN100	AL100	143

CS adapter sleeves are supplied completely with lock nuts and lock washers or lock plates.

Adapter for these bores are designated HE/HA

Adapter with the dimension C1 is equipped with a locking device as shown in the right illustration.

## Adapter Sleeves



TAPER 1:12

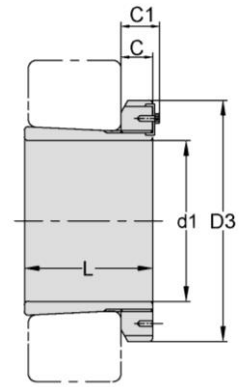
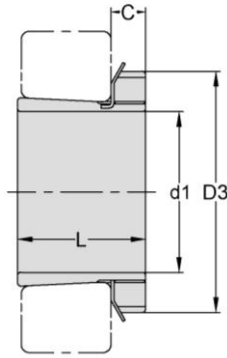
### H 32

Adapter Sleeve NO.	d1 mm	L mm	D3 mm	C mm	C <sub>1</sub> <sup>2)</sup> mm	Lock Nut	Lock Plate	Weight kg
H3260	280	240	380	40	53	AN60	AL60	34.1
H3264	300	258	400	42	56	AN64	AL64	39.3
H3268	320	288	440	55	72	AN68	AL68	54.6
H3272	340	299	460	58	75	AN72	AL72	60.2
H3276	360	310	490	60	77	AN76	AL76	69.6
H3280	380	328	520	62	82	AN80	AL80	81
H3284	400	352	540	70	90	AN84	AL84	94
H3288	410	361	560	70	90	AN88	AL88	118
H3292	430	382	580	75	95	AN92	AL92	132
H3296	450	397	620	75	95	AN96	AL96	152
H32/500	470	428	630	80	100	AN100	AL100	166

CS adapter sleeves are supplied completely with lock nuts and lock plates.

Adapter with the dimension C1 is equipped with a locking device as shown in the right illustration.

## Adapter Sleeves



H 39

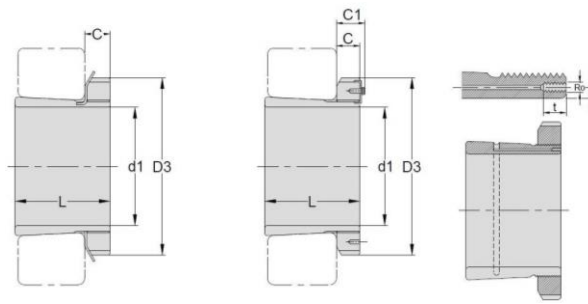
TAPER 1:12

Adapter Sleeve NO.	d1 mm	L mm	D3 mm	C mm	C <sub>1</sub> <sup>2)</sup> mm	Lock Nut	Lock Washer & Lock Plate	Weight kg
H3936	160	87	210	29.5	-	ANL36	AWL36	5.7
H3938	170	89	220	30.5	-	ANL38	AWL38	6.19
H3940	180	98	240	31.5	-	ANL40	AWL40	7.89
H3944	200	96	260	30	41	ANL44	ALL44	8.16
H3948	220	101	290	34	46	ANL48	ALL48	10.7
H3952	240	116	310	34	46	ANL52	ALL52	12.8
H3956	260	121	330	38	50	ANL56	ALL56	14.8
H3960	280	140	360	42	54	ANL60	ALL60	19.8
H3964	300	140	380	42	55	ANL64	ALL64	21
H3968	320	144	400	45	58	ANL64	ALL68	23.5
H3972	340	144	420	45	58	ANL72	ALL72	24.5
H3976	360	164	450	48	62	ANL76	ALL76	31.5
H3980	380	168	470	52	66	ANL80	ALL80	35
H3984	400	168	490	52	66	ANL84	ALL84	36.6
H3988	410	189	520	60	77	ANL88	ALL88	57.3
H3992	430	189	540	60	77	ANL92	ALL92	59.9
H3996	450	200	560	60	77	ANL96	ALL96	64.9
H39/500	470	208	580	68	85	ANL100	ALL100	73.1

CS adapter sleeves are supplied completely with lock nuts and lock washers or lock plates.

Adapter with the dimension C1 is equipped with a locking device as shown in the right illustration.

## Hydraulic Adapter Sleeves



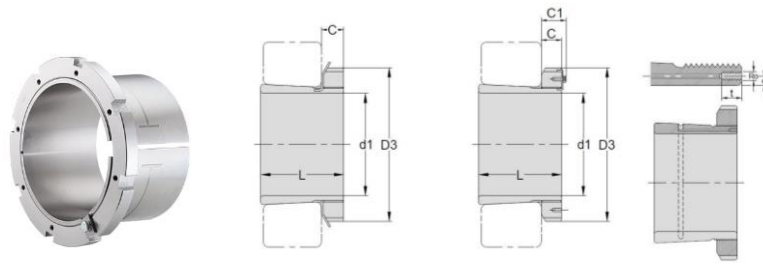
TAPER 1:12

### HOH 23

Hydraulic Adapter Sleeve NO.	d1 H mm	L mm	D3 mm	C mm	C <sub>1</sub> <sup>2)</sup> mm	Ro	e mm	t mm	Lock Nut	Lock Washer & Lock Plate	Weight kg
HOH2332	140	147	210	28	-	M6	4.2	8	AN32	AW32	9.14
HOH2334	150	154	220	29	-	M6	4.2	8	AN34	AW34	10.2
HOH2336	160	161	230	30	-	M6	4.2	8	AN36	AW36	11.3
HOH2338	170	169	240	31	-	M6	4.2	8	AN38	AW38	12.6
HOH2340	180	176	250	32	-	M6	4.2	8	AN40	AW40	13.9
HOH2344	200	186	280	35	-	M6	4.2	8	AN44	AL44	17.7
HOH2348	220	199	300	37	-	M6	4.2	8	AN48	AL48	20.7
HOH2352	240	211	330	38	-	M6	4.2	8	AN52	AL52	25.4
HOH2356	260	224	350	39	-	M6	4.2	8	AN56	AL56	29.1

CS Hydraulic adapter sleeves are supplied completely with lock nuts and lock washers or lock plates.

## Hydraulic Adapter Sleeves



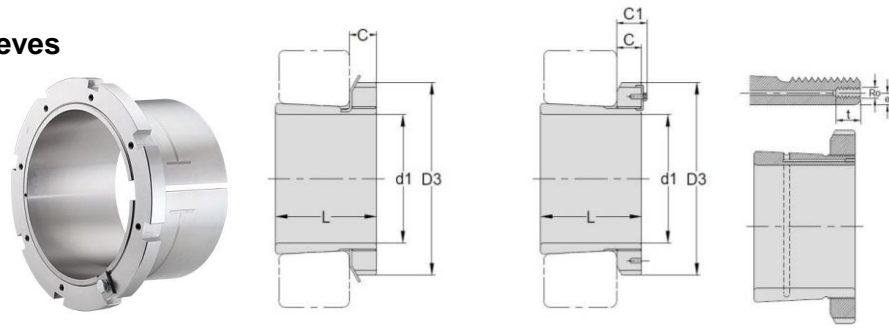
### HOH 30

TAPER 1:12

Hydraulic Adapter Sleeve NO.	d1 H mm	L mm	D3 mm	C mm	C <sub>1</sub> <sup>2)</sup> mm	Ro	e mm	t mm	Lock Nut	Lock Washer & Lock Plate	Weight kg
HOH3032	140	93	190	28	-	M6	4.2	8	ANL32	AWL32	5.21
HOH3034	150	101	200	29	-	M6	4.2	8	ANL34	AWL34	5.99
HOH3036	160	109	210	30	-	M6	4.2	8	ANL36	AWL36	6.83
HOH3038	170	112	220	31	-	M6	4.2	8	ANL38	AWL38	7.45
HOH3040	180	120	240	32	-	M6	4.2	8	ANL40	AWL40	9.19
HOH3044	200	126	260	30	41	M6	4.2	8	ANL44	ALL44	10.3
HOH3048	220	133	290	34	46	M6	4.2	8	ANL48	ALL48	13.2
HOH3052	240	145	310	34	46	M6	4.2	8	ANL52	ALL52	15.3
HOH3056	260	152	330	38	50	M6	4.2	8	ANL56	ALL56	17.7
HOH3060	280	168	360	42	54	M6	4.2	8	ANL60	ALL60	22.8
HOH3064	300	171	380	42	55	M6	3.5	8	ANL64	ALL64	24.6
HOH3068	320	187	400	45	58	M6	3.5	8	ANL68	ALL68	28.7
HOH3072	340	188	420	45	58	M6	3.5	8	ANL72	ALL72	30.5
HOH3076	360	193	450	48	62	M6	3.5	8	ANL76	ALL76	35.8
HOH3080	380	210	470	52	66	M6	3.5	8	ANL80	ALL80	41.3
HOH3084	400	212	490	52	66	M6	3.5	8	ANL84	ALL84	43.7
HOH3088	410	228	520	60	77	M8	6.5	12	ANL88	ALL88	65.2
HOH3092	430	234	540	60	77	M8	6.5	12	ANL92	ALL92	69.5
HOH3096	450	237	560	60	77	M8	6.5	12	ANL96	ALL96	73.3
HOH30/500	470	247	580	68	85	M8	6.5	12	ANL100	ALL100	81.8

CS Hydraulic adapter sleeves are supplied completely with lock nuts and lock washers or lock plates.

## Hydraulic Adapter Sleeves



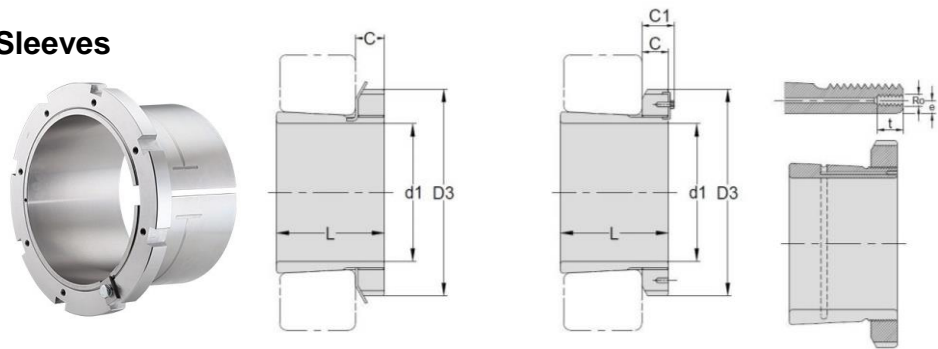
TAPER 1:12

### HOH 31

Hydraulic Adapter Sleeve NO.	d1 H mm	L mm	D3 mm	C mm	C <sub>1</sub> <sup>2)</sup> mm	Ro	e mm	t mm	Lock Nut	Lock Washer & Lock Plate	Weight kg
HOH3132	140	119	210	28	-	M6	4.2	8	AN32	AW32	7.67
HOH3134	150	122	220	29	-	M6	4.2	8	AN34	AW34	8.38
HOH3136	160	131	230	30	-	M6	4.2	8	AN36	AW36	9.5
HOH3138	170	141	240	31	-	M6	4.2	8	AN38	AW38	10.8
HOH3140	180	150	250	32	-	M6	4.2	8	AN40	AW40	12.1
HOH3144	200	161	280	35	-	M6	4.2	8	AN44	AL44	14.7
HOH3148	220	172	300	37	-	M6	4.2	8	AN48	AL48	17.3
HOH3152	240	190	330	36	-	M6	4.2	8	AN52	AL52	22
HOH3156	260	195	350	38	-	M6	4.2	8	AN56	AL56	24.5
HOH3160	280	208	380	40	53	M6	4.2	8	AN60	AL60	30.2
HOH3164	300	226	400	42	56	M6	3.5	8	AN64	AL64	34.9
HOH3168	320	254	440	55	72	M6	3.5	8	AN68	AL68	49.5
HOH3172	340	259	460	58	75	M6	3.5	8	AN72	AL72	54.2
HOH3176	360	264	490	60	77	M6	3.5	8	AN76	AL76	61.7
HOH3180	380	272	520	62	82	M6	3.5	8	AN80	AL80	70.6
HOH3184	400	304	540	70	90	M6	3.5	8	AN84	AL84	84.2
HOH3188	410	307	560	70	90	M8	6.5	12	AN88	AL88	104
HOH3192	430	326	580	75	95	M8	6.5	12	AN92	AL92	116
HOH3196	450	335	620	75	95	M8	6.5	12	AN96	AL96	133
HOH31/500	470	356	630	80	100	M8	6.5	12	AN100	AL100	143

CS Hydraulic adapter sleeves are supplied completely with lock nuts and lock washers or lock plates.

## Hydraulic Adapter Sleeves



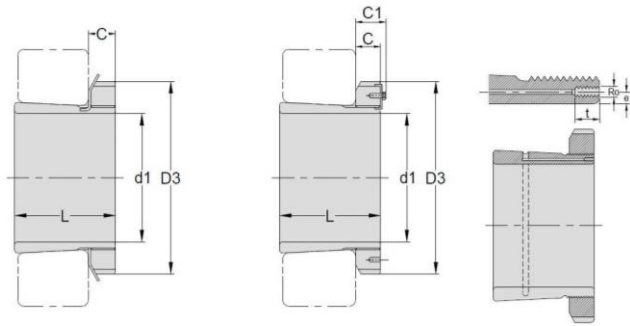
PAPER 1:12

### HOH 32

Hydraulic Adapter Sleeve NO.	d1 H mm	L mm	D3 mm	C mm	C <sub>1</sub> <sup>2)</sup> mm	Ro	e mm	t mm	Lock Nut	Lock Plate	Weight kg
HOH3260	280	240	380	40	53	M6	4.2	8	AN60	AL60	34.1
HOH3264	300	258	400	42	56	M6	3.5	8	AN64	AL64	39.3
HOH3268	320	288	440	55	72	M6	3.5	8	AN68	AL68	54.6
HOH3272	340	299	460	58	75	M6	3.5	8	AN72	AL72	60.2
HOH3276	360	310	490	60	77	M6	3.5	8	AN76	AL76	69.6
HOH3280	380	328	520	62	82	M6	3.5	8	AN80	AL80	81
HOH3284	400	352	540	70	90	M6	3.5	8	AN84	AL84	94
HOH3288	410	361	560	70	90	M8	6.5	12	AN88	AL88	118
HOH3292	430	382	580	75	95	M8	6.5	12	AN92	AL92	132
HOH3296	450	397	620	75	95	M8	6.5	12	AN96	AL96	152
HOH32/500	470	428	630	80	100	M8	6.5	12	AN100	AL100	166

CS Hydraulic adapter sleeves are supplied completely with lock nuts and lock plates.

## Hydraulic Adapter Sleeves



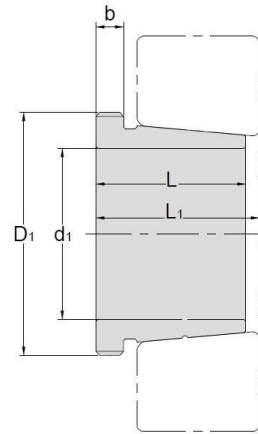
TAPER 1:12

### HOH 39

Hydraulic Adapter Sleeve NO.	d1 H mm	L mm	D3 mm	C mm	C <sub>1</sub> <sup>2)</sup> mm	Ro	e mm	t mm	Lock Nut	Lock Washer & Lock Plate	Weight kg
HOH3936	160	87	210	30	-	M6	4.2	8	ANL36	AWL36	5.7
HOH3938	170	89	220	31	-	M6	4.2	8	ANL38	AWL38	6.19
HOH3940	180	98	240	32	-	M6	4.2	8	ANL40	AWL40	7.89
HOH3944	200	96	260	30	41	M6	4.2	8	ANL44	ALL44	8.16
HOH3948	220	101	290	34	46	M6	4.2	8	ANL48	ALL48	10.7
HOH3952	240	116	310	34	46	M6	4.2	8	ANL52	ALL52	12.8
HOH3956	260	121	330	38	50	M6	4.2	8	ANL56	ALL56	14.8
HOH3960	280	140	360	42	54	M6	4.2	8	ANL60	ALL60	19.8
HOH3964	300	140	380	42	55	M6	3.5	8	ANL64	ALL64	21
HOH3968	320	144	400	45	58	M6	3.5	8	ANL68	ALL68	23.5
HOH3972	340	144	420	45	58	M6	3.5	8	ANL72	ALL72	24.5
HOH3976	360	164	450	48	62	M6	3.5	8	ANL76	ALL76	31.5
HOH3980	380	168	470	52	66	M6	3.5	8	ANL80	ALL80	35
HOH3984	400	168	490	52	66	M6	3.5	8	ANL84	ALL84	36.6
HOH3988	410	189	520	60	77	M8	6.5	12	ANL88	ALL88	57.3
HOH3992	430	189	540	60	77	M8	6.5	12	ANL92	ALL92	59.9
HOH3996	450	200	560	60	77	M8	6.5	12	ANL96	ALL96	64.9
HOH39/500	470	208	580	68	85	M8	6.5	12	ANL100	ALL100	73.1

CS Hydraulic adapter sleeves are supplied completely with lock nuts and lock washers or lock plates.

## Withdrawal Sleeves



### AH 2

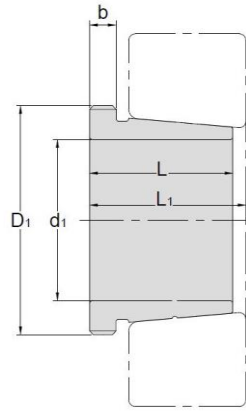
TAPER 1:12

Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AH208	35	25	27	6	M45*1.5	AN09	0.081
AH209	40	26	29	6	M50*1.5	AN10	0.095
AH210	45	28	31	7	M55*2	AN11	0.114
AH211	50	29	32	7	M60*2	AN12	0.132
AH212	55	32	35	8	M65*2	AN13	0.161
AH213	60	32.5	36	8	M75*2	AN15	0.213
AH214	65	33.5	37	8	M80*2	AN16	0.24
AH215	70	34.5	38	8	M85*2	AN17	0.259
AH216	75	35.5	39	8	M90*2	AN18	0.284
AH217	80	38.5	42	9	M95*2	AN19	0.314
AH218	85	40	44	9	M100*2	AN20	0.351
AH219	90	43	47	10	M105*2	AN21	0.403
AHX220	95	45	49	10	M110*2	AN22	0.481
AHX222	105	50	54	11	M120*2	AN24	0.547

© Dimension L1 decreases as the withdrawal sleeve is driven in during mounting

© M means metric thread.

## Withdrawal Sleeves



### AH 3

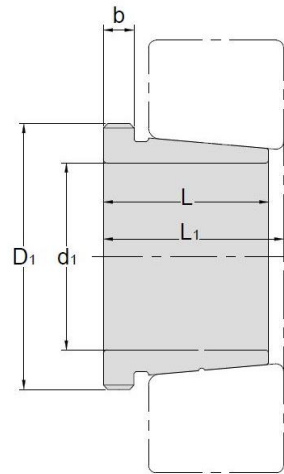
TAPER 1:12

Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AH308	35	29	32	6	M45*1.5	AN09	0.09
AH309	40	31	34	6	M50*1.5	AN10	0.109
AHX310	45	35	38	7	M55*2	AN11	0.137
AHX311	50	37	40	7	M60*2	AN12	0.161
AHX312	55	40	43	8	M65*2	AN13	0.189
AH313	60	42	45	8	M75*2	AN15	0.253
AH314	65	43	47	8	M80*2	AN16	0.28
AH315	70	45	49	8	M85*2	AN17	0.313
AH316	75	48	52	8	M90*2	AN18	0.365
AHX317	80	52	56	9	M95*2	AN19	0.429
AHX318	85	53	57	9	M100*2	AN20	0.461
AHX319	90	57	61	10	M105*2	AN21	0.532
AHX320	95	59	63	10	M110*2	AN22	0.582
AHX322	105	63	67	12	M120*2	AN24	0.663

① Dimension L1 decreases as the withdrawal sleeve is driven in during mounting

② M means metric thread.

## Withdrawal Sleeves



### AH 22

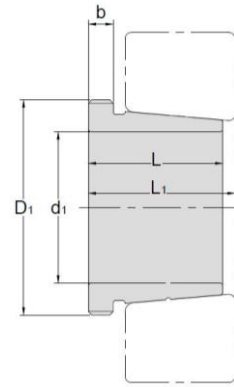
TAPER 1:12

Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AH2236	170	105	110	17	M200*3	AN40	3.73
AH2238	180	112	117	18	Tr210*4	HN42	4.25
AH2240	190	118	123	19	Tr220*4	HN44	4.68
AH2244	200	130	136	20	Tr240*4	HN48	9.1
AH2248	220	144	150	21	Tr260*4	HN52	11.1
AH2252	240	155	161	23	Tr290*4	HN58	14
AH2256	260	155	163	24	Tr310*5	HN62	15.2
AH2260	280	170	178	26	Tr330*5	HN66	18.1
AH2264	300	180	190	27	Tr350*5	HN70	20.2

© Dimension L1 decreases as the withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Withdrawal Sleeves



TAPER 1:12

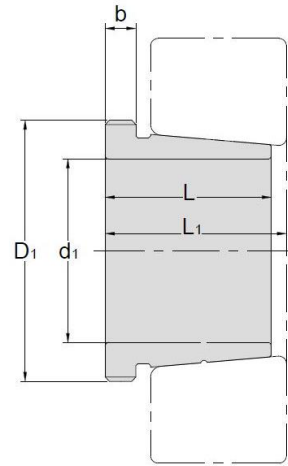
### AH 23

Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Thread D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AH2308	35	40	43	7	M45*1.5	AN09	0.128
AH2309	40	44	47	7	M50*1.5	AN10	0.164
AHX2310	45	50	53	9	M55*2	AN11	0.209
AHX2311	50	54	57	10	M60*2	AN12	0.253
AHX2312	55	58	61	11	M65*2	AN13	0.297
AH2313	60	61	64	12	M75*2	AN15	0.395
AHX2314	65	64	68	12	M80*2	AN16	0.466
AHX2315	70	68	72	12	M85*2	AN17	0.534
AHX2316	75	71	75	12	M90*2	AN18	0.597
AHX2317	80	74	78	13	M95*2	AN19	0.67
AHX2318	85	79	83	14	M100*2	AN20	0.779
AHX2319	90	85	89	16	M105*2	AN21	0.886
AHX2320	95	90	94	16	M110*2	AN22	0.998
AHX2322	105	98	102	16	M125*2	AN25	1.35
AHX2324	115	105	109	17	M135*2	AN27	1.6
AHX2326	125	115	119	19	M145*2	AN29	1.97
AHX2328	135	125	130	20	M155*3	AN31	2.33
AHX2330	145	135	140	24	M165*3	AN33	2.82
AH2332	150	140	146	24	M180*3	AN36	4.72
AH2334	160	146	152	24	M190*3	AN38	5.25
AH2336	170	154	160	26	M200*3	AN40	5.83
AH2338	180	160	167	26	Tr210*4	HN42	6.63
AH2340	190	170	177	30	Tr220*4	HN44	7.54
AH2344	200	181	189	30	Tr240*4	HN48	13.5
AH2348	220	189	197	30	Tr260*4	HN52	15.5
AH2352	240	205	213	30	Tr290*4	HN58	19.6
AH2356	260	212	220	30	Tr310*5	HN62	21.6

① Dimension L1 decreases as the withdrawal sleeve is driven in during mounting

② M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Withdrawal Sleeves



### AH 30

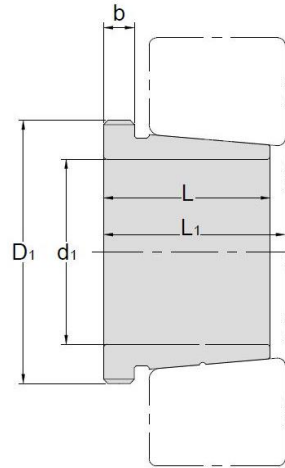
TAPER 1:12

Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AHX3024	115	60	64	13	M130*2	AN26	0.75
AHX3026	125	67	71	14	M140*2	AN28	0.93
AHX3028	135	68	73	14	M150*2	AN30	1.01
AHX3030	145	72	77	15	M160*3	AN32	1.15
AH3032	150	77	82	16	M170*3	AN34	2.06
AH3034	160	85	90	17	M180*3	AN36	2.43
AH3036	170	92	98	17	M190*3	AN38	2.81
AH3038	180	96	102	18	Tr205*4	HNL41	3.32
AH3040	190	102	108	19	Tr215*4	HNL43	3.8
AH3044	200	111	117	20	Tr235*4	HNL47	7.4
AH3048	220	116	123	21	Tr260*4	HNL52	8.75
AH3052	240	128	135	23	Tr280*4	HNL56	10.7
AH3056	260	131	139	24	Tr300*4	HNL60	12
AH3060	280	145	153	26	Tr320*5	HNL64	14.4
AH3064	300	149	157	27	Tr345*5	HNL69	16
AH3068	320	162	171	28	Tr365*5	HNL73	19.5
AH3072	340	167	176	30	Tr385*5	HNL77	21
AH3076	360	170	180	31	Tr410*5	HNL82	23.2
AH3080	380	183	193	33	Tr430*5	HNL86	27.3
AH3084	400	186	196	34	Tr450*5	HNL90	29
AHX3088	420	194	205	35	Tr470*5	HNL94	32
AHX3092	440	202	213	37	Tr490*5	HNL98	35.2
AHX3096	460	205	217	38	Tr520*6	HNL104	39.2
AHX30/500	480	209	221	40	Tr540*6	HNL108	42.5

© Dimension L1 decreases as the withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Withdrawal Sleeves



### AH 31

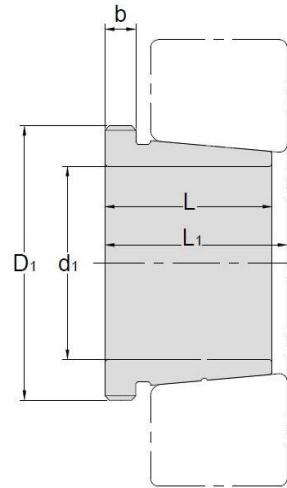
TAPER 1:12

Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AHX3120	95	64	68	11	M110*2	AN22	0.65
AHX3122	105	68	72	11	M120*2	AN24	0.76
AHX3124	115	75	79	12	M130*2	AN26	0.95
AHX3126	125	78	82	12	M140*2	AN28	1.08
AHX3128	135	83	88	14	M150*2	AN30	1.28
AHX3130	145	96	101	15	M165*3	AN33	1.79
AH3132	150	103	108	16	M180*3	AN36	3.21
AH3134	160	104	109	16	M190*3	AN38	3.4
AH3136	170	116	122	19	M200*3	AN40	4.22
AH3138	180	125	131	20	Tr210*4	HN42	4.89
AH3140	190	134	140	21	Tr220*4	HN44	5.49
AH3144	200	145	151	23	Tr240*4	HN48	10.4
AH3148	220	154	161	25	Tr260*4	HN52	12
AH3152	240	172	179	26	Tr290*4	HN58	16.2
AH3156	260	175	183	28	Tr310*5	HN62	17.5
AH3160	280	192	200	30	Tr330*5	HN66	20.8
AH3164	300	209	217	31	Tr350*5	HN70	24.5
AH3168	320	225	234	33	Tr370*5	HN74	29
AH3172	340	229	238	35	Tr400*5	HN80	33
AH3176	360	232	242	36	Tr420*5	HN84	35.7
AH3180	380	240	250	38	Tr440*5	HN88	39.5
AH3184	400	266	276	40	Tr460*5	HN92	46.5
AHX3188	420	270	281	42	Tr480*5	HN96	49.8
AHX3192	440	285	296	43	Tr510*6	HN102	57.9
AHX3196	460	295	307	45	Tr530*6	HN106	63.1
AHX31/500	480	313	325	47	Tr550*6	HN110	70.9

© Dimension L1 decreases as the withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Withdrawal Sleeves



### AH 32

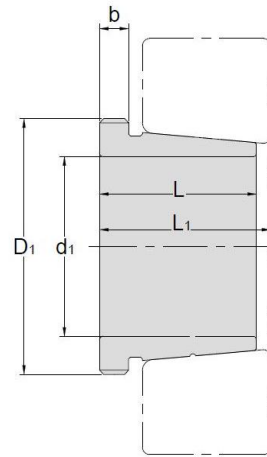
TAPER 1:12

Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AHX3218	85	63	67	10	M100*2	AN20	0.576
AHX3220	95	73	77	11	M110*2	AN22	0.767
AHX3222	105	82	86	11	M125*2	AN25	1.04
AHX3224	115	90	94	13	M135*2	AN27	1.3
AHX3226	125	98	102	15	M145*2	AN29	1.58
AHX3228	135	104	109	15	M155*3	AN31	1.84
AHX3230	145	114	119	17	M165*3	AN33	2.22
AH3232	150	124	130	20	M180*3	AN36	4.08
AH3234	160	134	140	24	M190*3	AN38	4.8
AH3236	170	140	146	24	M200*3	AN40	5.32
AH3238	180	145	152	25	Tr210*4	HN42	5.9
AH3240	190	153	160	25	Tr220*4	HN44	6.68
AH3260	280	228	236	34	Tr330*5	HN66	26
AH3264	300	246	254	36	Tr350*5	HN70	30.6
AH3268	320	264	273	38	Tr370*5	HN74	35.8
AH3272	340	274	283	40	Tr400*5	HN80	41.6
AH3276	360	284	294	42	Tr420*5	HN84	46.3
AH3280	380	302	312	44	Tr440*5	HN88	52.5
AH3284	400	321	331	46	Tr460*5	HN92	59.7
AHX3288	420	330	341	48	Tr480*5	HN96	64.8
AHX3292	440	349	360	50	Tr510*6	HN102	75.2
AHX3296	460	364	376	52	Tr530*6	HN106	83.1
AHX32/500	480	393	405	54	Tr550*6	HN110	94.7

© Dimension L1 decreases as the withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Withdrawal Sleeves



### AH 39

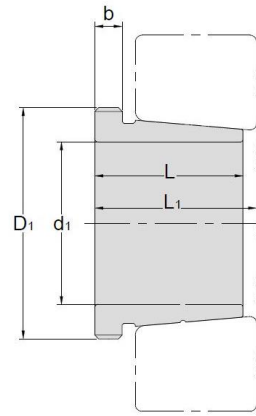
TAPER 1:12

Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AH3936	170	66	71	13	M190*3	AN38	1.91
AH3938	180	66	71	13	M200*3	AN40	2.02
AH3940	190	77	83	16	Tr210*4	HN42	2.62
AH3944	200	77	83	16	Tr230*4	HN46	4.83
AH3948	220	77	83	16	Tr250*4	HN50	5.29
AH3952	240	94	100	18	Tr270*4	HN54	7.06
AH3956	260	94	100	18	Tr290*4	HN58	7.7
AH3960	280	112	119	21	Tr310*5	HN62	10.1
AH3964	300	112	119	21	Tr330*5	HN66	10.8
AH3968	320	112	119	21	Tr360*5	HNL72	12.4
AH3972	340	112	119	21	Tr380*5	HNL76	13.1
AH3976	360	130	138	22	Tr400*5	HNL80	15.9
AH3980	380	130	138	22	Tr420*5	HNL84	17.2
AH3984	400	130	138	22	Tr440*5	HNL88	18.1
AH3988	420	145	153	25	Tr460*5	HNL92	21.5
AH3992	440	145	153	25	Tr480*5	HNL96	22.5
AH3996	460	158	167	28	Tr500*5	HNL100	26
AH39/500	480	162	172	32	Tr520*6	HNL104	27.7

⊙ Dimension L1 decreases as the withdrawal sleeve is driven in during mounting

⊙ M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Withdrawal Sleeves



### AH 240

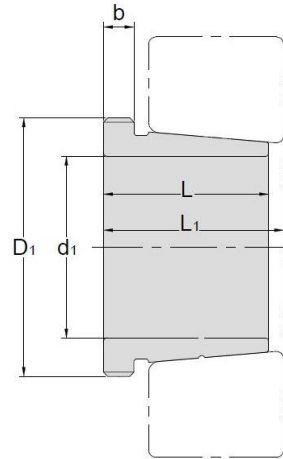
TAPER 1:12

Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Thread D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AH24024	115	73	82	13	M125*2	AN25	0.65
AH24026	125	83	93	14	M135*2	AN27	0.84
AH20428	135	83	93	14	M145*2	AN29	0.91
AH24030	145	90	101	15	M155*3	AN31	1.04
AH24032	150	95	106	15	M170*3	AN34	2.33
AH24034	160	106	117	16	M180*3	AN36	2.8
AH24036	170	116	127	16	M190*3	AN38	3.1
AH24038	180	118	131	18	M200*3	AN40	3.5
AH24040	190	127	140	18	Tr210*4	HN42	3.93
AH24044	200	138	152	20	Tr230*4	HN46	8.25
AH24048	220	138	153	20	Tr250*4	HN50	9
AH24052	240	162	178	22	Tr270*4	HN54	11.8
AH24056	260	162	179	22	Tr290*4	HN58	12.8
AH24060	280	184	202	24	Tr310*5	HN62	15.5
AH24064	300	184	202	24	Tr330*5	HN66	16.6
AH24068	320	206	225	26	Tr360*5	HNL72	21.7
AH24072	340	206	226	26	Tr380*5	HNL76	22.7
AH24076	360	208	228	28	Tr400*5	HNL80	23.7
AH24080	380	228	248	28	Tr420*5	HNL84	27.1
AH24084	400	230	252	30	Tr440*5	HNL88	29
AH24088	420	242	264	30	Tr460*5	HNL92	31.9
AH24092	440	250	273	32	Tr480*5	HNL96	34.7
AH24096	460	250	273	32	Tr500*5	HNL100	36.6
AH240/500	480	253	276	35	Tr520*6	HNL104	39.5

© Dimension L1 decreases as the withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Withdrawal Sleeves



### AH 241

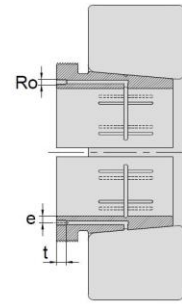
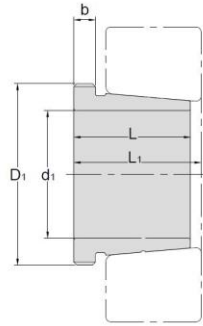
TAPER 1:12

Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AH24122	105	82	91	13	M115*2	AN23	0.73
AH24124	115	93	102	13	M130*2	AN26	1
AH24126	125	94	104	14	M140*2	AN28	1.11
AH24128	135	99	109	14	M150*2	AN30	1.25
AH24130	145	115	126	15	M160*3	AN32	1.56
AH24132	150	124	135	15	M170*3	AN34	3
AH24134	160	125	136	16	M180*3	AN36	3.21
AH24136	170	134	145	16	M190*3	AN38	3.68
AH24138	180	146	159	18	M200*3	AN40	4.28
AH24140	190	158	171	18	Tr210*4	HN42	5.1
AH24144	200	170	184	20	Tr230*4	HN46	10.2
AH24148	220	180	195	20	Tr260*4	HN52	12.5
AH24152	240	202	218	22	Tr280*4	HN56	15.4
AH24156	260	202	219	22	Tr300*4	HN60	16.3
AH24160	280	224	242	24	Tr320*5	HN64	19.5
AH24164	300	242	260	24	Tr340*5	HN68	21.4
AH24168	320	269	288	26	Tr360*5	HN72	27.1
AH24172	340	269	289	26	Tr380*5	HN76	29.6
AH24176	360	271	291	28	Tr400*5	HN80	31.3
AH24180	380	278	298	28	Tr420*5	HN84	34.4
AH24184	400	310	332	30	Tr440*5	HN88	40.3
AH24188	420	310	332	30	Tr460*5	HN92	42.3
AH24192	440	332	355	32	Tr480*5	HN96	47.6
AH24196	460	343	368	35	Tr500*5	HN100	52.7
AH241/500	480	362	387	37	Tr520*6	HN104	58.8

© Dimension L1 decreases as the withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Hydraulic Withdrawal Sleeves



### AOH 22

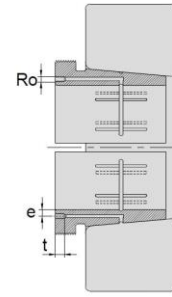
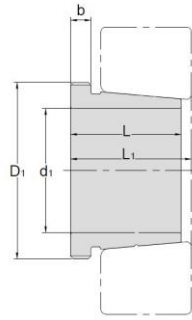
TAPER 1:12

Hydraulic Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Ro	e mm	t mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AOH2236	170	105	110	17	M6	4.5	8	M200*3	AN40	3.73
AOH2238	180	112	117	18	M6	4.5	8	Tr210*4	HN42	4.25
AOH2240	190	118	123	19	M6	4.5	8	Tr220*4	HN44	4.68
AOH2244	200	130	136	20	G1/8	8.5	12	Tr240*4	HN48	9.1
AOH2248	220	144	150	21	G1/8	8.5	12	Tr260*4	HN52	11.1
AOH2252	240	155	161	23	G1/8	8.5	12	Tr290*4	HN58	14
AOH2256	260	155	163	24	G1/8	8.5	12	Tr310*4	HN62	15.2
AOH2260	280	170	178	26	G1/8	8.5	12	Tr330*4	HN66	18.1
AOH2264	300	180	190	27	G1/8	8.5	12	Tr350*4	HN70	20.2

© Dimension L1 decreases as the Hydraulic withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Hydraulic Withdrawal Sleeves



AOH 23

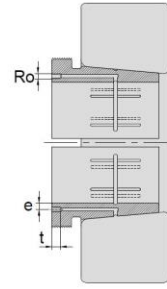
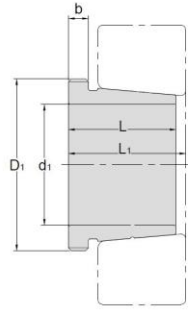
TAPER 1:12

Hydraulic Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Ro	e mm	t mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AOH2332	150	140	146	24	M6	4.5	8	M180*3	AN36	4.72
AOH2334	160	146	152	24	M6	4.5	8	M190*3	AN38	5.25
AOH2336	170	154	160	26	M6	4.5	8	M200*3	AN40	5.83
AOH2338	180	160	167	26	M6	4.5	8	Tr210*4	HN42	6.63
AOH2340	190	170	177	30	M6	4.5	8	Tr220*4	HN44	7.54
AOH2344	200	181	189	30	G1/8	8.5	12	Tr240*4	HN48	13.5
AOH2348	220	189	197	30	G1/8	8.5	12	Tr260*4	HN52	15.5
AOH2352	240	205	213	30	G1/8	8.5	12	Tr290*4	HN58	19.6
AOH2356	260	212	220	30	G1/8	8.5	12	Tr310*5	HN62	21.6

© Dimension L1 decreases as the Hydraulic withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Hydraulic Withdrawal Sleeves



### AOH 30

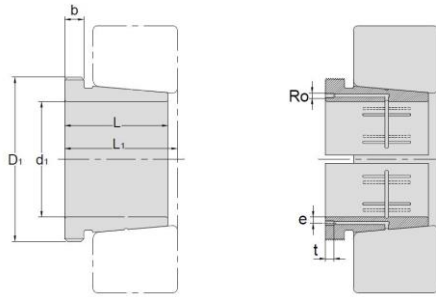
TAPER 1:12

Hydraulic Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Ro	e mm	t mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AOH3032	150	77	82	16	M6	4.2	8	M170*3	AN34	2.06
AOH3034	160	85	90	17	M6	4.2	8	M180*3	AN36	2.43
AOH3036	170	92	98	17	M6	4.2	8	M190*3	AN38	2.81
AOH3038	180	96	102	18	M6	4.2	8	Tr205*4	HNL41	3.32
AOH3040	190	102	108	19	M6	4.2	8	Tr215*4	HNL43	3.8
AOH3044	200	111	117	20	G1/8	8.5	12	Tr235*4	HNL47	7.4
AOH3048	220	116	123	21	G1/8	8.5	12	Tr260*4	HNL52	8.75
AOH3052	240	128	135	23	G1/8	8.5	12	Tr280*4	HNL56	10.7
AOH3056	260	131	139	24	G1/8	8.5	12	Tr300*4	HNL60	12
AOH3060	280	145	153	26	G1/8	8.5	12	Tr320*5	HNL64	14.4
AOH3064	300	149	157	27	G1/8	8.5	12	Tr345*5	HNL69	16
AOH3068	320	162	171	28	G1/8	8.5	12	Tr365*5	HNL73	19.5
AOH3072	340	167	176	30	G1/8	8.5	12	Tr385*5	HNL77	21
AOH3076	360	170	180	31	G1/8	8.5	12	Tr410*5	HNL82	23.2
AOH3080	380	183	193	33	G1/8	8.5	12	Tr430*5	HNL86	27.3
AOH3084	400	186	196	34	G1/8	8.5	12	Tr450*5	HNL90	29
AOH3088	420	194	205	35	G1/8	8.5	12	Tr470*5	HNL94	32
AOH3092	440	202	213	37	G1/8	8.5	12	Tr490*5	HNL98	35.2
AOH3096	460	205	217	38	G1/8	8.5	12	Tr520*6	HNL104	39.2
AOH30/500	480	209	221	40	G1/8	8.5	12	Tr540*6	HNL108	42.5

⊙ Dimension L1 decreases as the Hydraulic withdrawal sleeve is driven in during mounting

⊙ M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Hydraulic Withdrawal Sleeves



TAPER 1:12

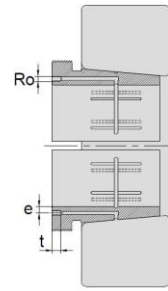
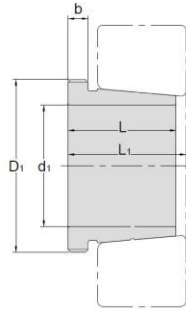
### AOH 31

Hydraulic Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Ro	e mm	t mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AOH3132	150	103	108	16	M6	4.5	8	M180*3	AN36	3.21
AOH3134	160	104	109	16	M6	4.5	8	M190*3	AN38	3.4
AOH3136	170	116	122	19	M6	4.5	8	M200*3	AN40	4.22
AOH3138	180	125	131	20	M6	4.5	8	Tr210*4	HN42	4.89
AOH3140	190	134	140	21	M6	4.5	8	Tr220*4	HN44	5.49
AOH3144	200	145	151	23	G1/8	8.5	12	Tr240*4	HN48	10.4
AOH3148	220	154	161	25	G1/8	8.5	12	Tr260*4	HN52	12
AOH3152	240	172	179	26	G1/8	8.5	12	Tr290*4	HN58	16.2
AOH3156	260	175	183	28	G1/8	8.5	12	Tr310*4	HN62	17.5
AOH3160	280	192	200	30	G1/8	8.5	12	Tr330*5	HN66	20.8
AOH3164	300	209	217	31	G1/8	8.5	12	Tr350*5	HN70	24.5
AOH3168	320	225	234	33	G1/8	8.5	12	Tr370*5	HN74	29
AOH3172	340	229	238	35	G1/8	8.5	12	Tr400*5	HN80	33
AOH3176	360	232	242	36	G1/8	8.5	12	Tr420*5	HN84	35.7
AOH3180	380	240	250	38	G1/8	8.5	12	Tr440*5	HN88	39.5
AOH3184	400	266	276	40	G1/8	8.5	12	Tr460*5	HN92	46.5
AOH3188	420	270	281	42	G1/8	8.5	12	Tr480*5	HN96	49.8
AOH3192	440	285	296	43	G1/8	8.5	12	Tr510*6	HN102	57.9
AOH3196	460	295	307	45	G1/8	8.5	12	Tr530*6	HN106	63.1
AOH 31/500	480	313	325	47	G1/8	8.5	12	Tr550*6	HN110	70.9

© Dimension L1 decreases as the Hydraulic withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Hydraulic Withdrawal Sleeves



TAPER 1:12

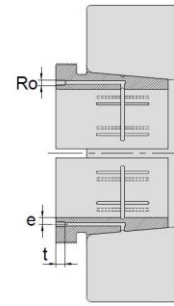
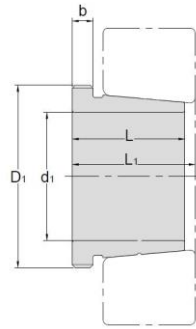
### AOH 32

Hydraulic Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Ro	e mm	t mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AOH3232	150	124	130	20	M6	4.5	8	M180*3	AN36	4.08
AOH3234	160	134	140	24	M6	4.5	8	M190*3	AN38	4.8
AOH3236	170	140	146	24	M6	4.5	8	M200*3	AN40	5.32
AOH3238	180	145	152	25	M6	4.5	8	Tr210*4	HN42	5.9
AOH3240	190	153	160	25	M6	4.5	8	Tr220*4	HN44	6.68
AOH3260	280	228	236	34	G1/8	8.5	12	Tr330*5	HN66	26
AOH3264	300	246	254	36	G1/8	8.5	12	Tr350*5	HN70	30.6
AOH3268	320	264	273	38	G1/8	8.5	12	Tr370*5	HN74	35.8
AOH3272	340	274	283	40	G1/8	8.5	12	Tr400*5	HN80	41.6
AOH3276	360	284	294	42	G1/8	8.5	12	Tr420*5	HN84	46.3
AOH3280	380	302	312	44	G1/8	8.5	12	Tr440*5	HN88	52.5
AOH3284	400	321	331	46	G1/8	8.5	12	Tr460*5	HN92	59.7
AOH3288	420	330	341	48	G1/8	8.5	12	Tr480*5	HN96	64.8
AOH3292	440	349	360	50	G1/8	8.5	12	Tr510*6	HN102	75.2
AOH3296	460	364	376	52	G1/8	8.5	12	Tr530*6	HN106	83.1
AOH32/500	480	393	405	54	G1/8	8.5	12	Tr550*6	HN110	94.7

© Dimension L1 decreases as the Hydraulic withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Hydraulic Withdrawal Sleeves



TAPER 1:12

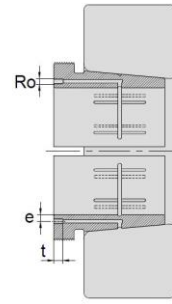
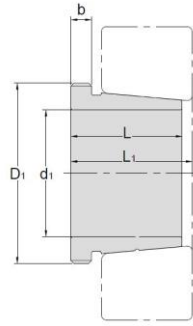
### AOH 39

Hydraulic Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Ro	e mm	t mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AOH3944	200	77	83	16	M8	7.5	12	Tr230*4	HN46	4.83
AOH3948	220	77	83	16	M8	7.5	12	Tr250*4	HN50	5.29
AOH3952	240	94	100	18	M8	7.5	12	Tr270*4	HN54	7.06
AOH3956	260	94	100	18	M8	7.5	12	Tr290*4	HN58	7.07
AOH3960	280	112	119	21	M8	7.5	12	Tr310*5	HN62	10.1
AOH3964	300	112	119	21	M8	7.5	12	Tr330*5	HN66	10.8
AOH3968	320	112	119	21	M8	7.5	12	Tr360*5	HNL72	12.4
AOH3972	340	112	119	21	M8	7.5	12	Tr380*5	HNL76	13.1
AOH3976	360	130	138	22	M8	7.5	12	Tr400*5	HNL80	15.9
AOH3980	380	130	138	22	M8	7.5	12	Tr420*5	HNL84	17.2
AOH3984	400	130	138	22	M8	7.5	12	Tr440*5	HNL88	18.1
AOH3988	420	145	153	25	G1/8	8.5	12	Tr460*5	HNL92	21.5
AOH3992	440	145	153	25	G1/8	8.5	12	Tr480*5	HNL96	22.5
AOH3996	460	158	167	28	G1/8	8.5	12	Tr500*5	HNL100	26
AOH39/500	480	162	172	32	G1/8	8.5	12	Tr520*6	HNL104	27.7

© Dimension L1 decreases as the Hydraulic withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Hydraulic Withdrawal Sleeves



### AOH 240

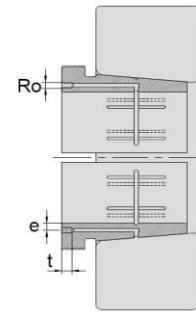
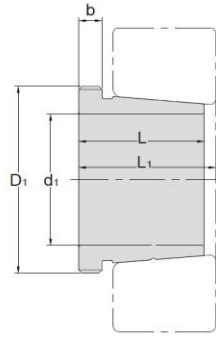
TAPER 1:12

Hydraulic Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Ro	e mm	t mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AOH24044	200	138	152	20	M6	8	8	Tr230*4	HN46	8.25
AOH24048	220	138	153	20	M6	8	8	Tr250*4	HN50	9
AOH24052	240	162	178	22	M6	8	8	Tr270*4	HN54	11.8
AOH24056	260	162	179	22	M6	8	8	Tr290*4	HN58	12.8
AOH24060	280	184	202	24	M6	8	8	Tr310*5	HN62	15.5
AOH24064	300	184	202	24	M6	8	8	Tr330*5	HN66	16.6
AOH24068	320	206	225	26	G1/8	8.5	12	Tr360*5	HNL72	21.7
AOH24072	340	206	226	26	G1/8	8.5	12	Tr380*5	HNL76	22.7
AOH24076	360	208	228	28	G1/8	8.5	12	Tr400*5	HNL80	23.7
AOH24080	380	228	248	28	G1/8	8.5	12	Tr420*5	HNL84	27.1
AOH24084	400	230	252	30	G1/8	8.5	12	Tr440*5	HNL88	29
AOH24088	420	242	264	30	G1/8	8.5	12	Tr460*5	HNL92	31.9
AOH24092	440	250	273	32	G1/8	8.5	12	Tr480*5	HNL96	34.7
AOH24096	460	250	273	32	G1/8	8.5	12	Tr500*5	HNL100	36.6
AOH240/500	480	253	276	35	G1/8	8.5	12	Tr530*6	HNL104	39.5

© Dimension L1 decreases as the Hydraulic withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Hydraulic Withdrawal Sleeves



TAPER 1:12

### AOH 241

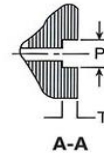
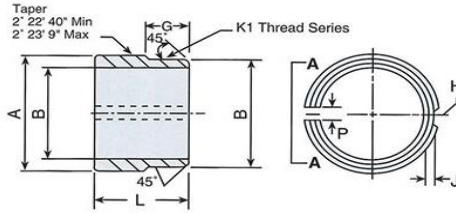
Hydraulic Withdrawal Sleeves NO.	d1 mm	L mm	L <sub>1</sub> <sup>1)</sup> mm	b mm	Ro	e mm	t mm	Thread <sup>2)</sup> D1 mm	Appropriate Withdrawal Nut No.	Weight kg
AOH24144	200	170	184	20	M6	8	8	Tr230*4	HN46	10.2
AOH24148	220	180	195	20	G1/8	8.5	12	Tr260*4	HN52	12.5
AOH24152	240	202	218	22	G1/8	8.5	12	Tr280*4	HN56	15.4
AOH24156	260	202	219	22	G1/8	8.5	12	Tr300*4	HN60	16.3
AOH24160	280	224	242	24	G1/8	8.5	12	Tr320*5	HN64	19.5
AOH24164	300	242	260	24	G1/8	8.5	12	Tr340*5	HN68	21.4
AOH24168	320	269	288	26	G1/8	8.5	12	Tr360*5	HN72	27.1
AOH24172	340	269	289	26	G1/8	8.5	12	Tr380*5	HN76	29.6
AOH24176	360	271	291	28	G1/8	8.5	12	Tr400*5	HN80	31.3
AOH24180	380	278	298	28	G1/8	8.5	12	Tr420*5	HN84	34.4
AOH24184	400	310	332	30	G1/8	8.5	12	Tr440*5	HN88	40.3
AOH24188	420	310	332	30	G1/8	8.5	12	Tr460*5	HN92	42.3
AOH24192	440	332	355	32	G1/8	8.5	12	Tr480*5	HN96	47.6
AOH24196	460	343	368	35	G1/8	8.5	12	Tr500*5	HN100	52.7
AOH241/500	480	362	387	37	G1/8	8.5	12	Tr530*6	HN104	58.8

© Dimension L1 decreases as the Hydraulic withdrawal sleeve is driven in during mounting

© M means metric thread. Tr means 30°, trapezoid thread and the digits are outside diameter of thread and pitch.

## Adapter Sleeve Dimensions(Inches)

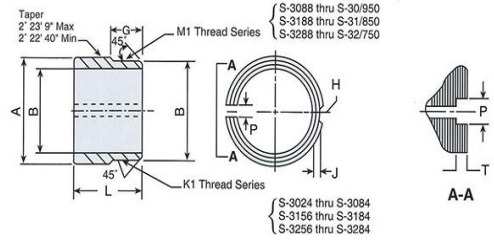
S-00



Sleeve Number	Bore Diameter d max	Diameter to Sharp Corner A mm		Length L min		Threads			Slot Width F min	Relief		Lockplate Slot		
		S00	S100	S00	S100	Major Diameter B max	No. per Inch K1	G max		J max	H min	Width P min	Depth T min	
S-04	S-104	0.692	0.855	0.875	1.224	1.46	0.781	32	0.531	0.24				
S-05	S-105	0.754	1.052	1.082	1.259	1.617	0.969	32	0.57	0.24				
S-06	S-106	0.942	1.256	1.292	1.343	1.779	1.173	18	0.632	0.24				
S-07	S-107	1.192	1.459	1.499	1.449	1.922	1.376	18	0.664	0.24				
S-08	S-108	1.317	1.659	1.702	1.494	2.005	1.563	18	0.672	0.365				
S-09	S-109	1.442	1.863	1.909	1.574	2.123	1.767	18	0.672	0.365	0.125	0.062		
S-10	S-110	1.692	2.07	2.122	1.755	2.384	1.967	18	0.734	0.365				
S-11	S-111	1.942	2.273	2.329	1.835	2.506	2.157	18	0.739	0.365				
S-12	S-112	2.067	2.48	2.535	1.979	2.649	2.36	18	0.77	0.365				
S-13	S-113	2.192	2.683	2.739	2.09	2.761	2.548	18	0.802	0.365				
S-14	S-114	2.317	2.894	2.95	2.264	2.935	2.751	18	0.802	0.365	0.188	0.062		
S-15	S-115	2.442	3.09	3.155	2.286	3.074	2.933	12	0.905	0.365	0.188	0.062		
S-16	S-116	2.692	3.293	3.362	2.366	3.194	3.137	12	0.905	0.428	0.188	0.062		
S-17	S-117	2.942	3.497	3.566	2.476	3.302	3.34	12	0.936	0.428				
S-18	S-118	3.192	3.7	3.776	2.636	3.543	3.527	12	1.02	0.428				
S-19	S-119	3.317	3.904	3.982	2.75	3.692	3.73	12	1.051	0.428	0.188	0.062		
S-20	S-120	3.442	4.107	4.199	2.859	3.961	3.918	12	1.083	0.428				
S-21	S-121	3.692	4.314	4.412	2.977	4.157	4.122	12	1.083	0.428				
S-22	S-122	3.942	4.524	4.619	3.196	4.338	4.325	12	1.145	0.428				
S-24	S-124	4.192	4.937	5.035	3.456	4.638	4.716	12	1.176	0.428				
S-26	S-126	4.442	5.35	5.452	3.752	4.972	5.106	12	1.239	0.552	0.281	0.125		
S-28	S-128	4.942	5.757	5.869	3.971	5.313	5.497	12	1.301	0.74				
S-30	S-130	5.192	6.167	6.282	4.231	5.611	5.888	12	1.364	0.74	0.281	0.125		
S-32	S-132	5.442	6.584	6.696	4.568	5.91	6.284	8	1.52	0.74	0.281	0.125		
S-34	S-134	5.942	6.997	7.109	4.837	6.178	6.659	8	1.551	0.865				
S-36	S-136	6.442	7.404	7.522	5.028	6.446	7.066	8	1.583	0.865				
S-38	S-138	6.942	7.814	7.939	5.251	6.748	7.472	8	1.614	0.865				
S-40	S-140	7.192	8.221	8.355	5.474	7.085	7.847	8	1.676	0.99				
S-44	S-144	7.942	9.041	9.153	5.891	7.277	8.628	8	1.708	0.99				
S-48	S-148	8.942	9.878	9.994	6.628	8.099	9.422	6	1.989	0.302			1.125	0.500
S-52	S-152	9.442	10.73	10.83	7.583	8.764	10.192	6	2.135	0.302			1.188	0.500

# Adapter Sleeve Dimension(Inches)

## S-3000



Sleeve Number	Sleeve Bore Dia d max	Diameter to Sharp Corner A min			Length L min			Major Diameter B max	Threads		G max	Slot Width F min	Relief		Lockplate Slot	
		S-3000	S-3100	S-3200	S-3000	S-3100	S-3200		No. per Inch K1 M1	S-3000			S-3100	J max	H min	P min
S- 3024	4.192	4.89			2.94			4.716	12		1.26	0.428				
S- 3026	4.442	5.3			3.23			5.106	12		1.32	0.552	0.28	0.13		
S- 3028	4.942	5.7			3.33			5.497	12		1.39	0.74				
S- 3030	5.192	6.11			3.48			5.888	12		1.42	0.74	0.28	0.13		
S- 3032	5.442	6.51			3.7			6.284	8		1.48	0.74	0.28	0.13		
S- 3034	5.942	6.93			4.01			6.659	8		1.51	0.865				
S- 3036	6.442	7.35			4.33			7.066	8		1.54	0.865				
S- 3038	6.942	7.74			4.4			7.472	8		1.6	0.865				
S- 3040	7.192	8.16			4.74			7.847	8		1.67	0.99				
S- 3044	7.942	8.98			5.12			8.628	8		1.76	0.99				
S- 3048	8.942	9.77			5.42			9.442	6		1.98	0.302			1.13	0.5
S- 3052	9.444	10.6			6.01			10.192	6		2.14	0.302			1.19	0.5
S- 3056	S- 3156	S- 3256	10.444	11.4	11.5	11.6	6.18	7.76	8.94	11.004	6	2.23	2.23	0.302	1.25	0.5
S- 3060	S- 3160	S- 3260	10.944	12.2	12.4	12.5	6.72	8.37	9.63	11.785	6	2.29	2.29	0.302	1.38	0.5
S- 3064	S- 3164	S- 3264	11.944	13	13.2	13.3	6.94	9.1	10.4	12.562	6	2.39	2.39	0.302	1.44	0.5
S- 3068	S- 3168	S- 3268	12.444	13.8	14	14.1	7.53	9.78	11.1	13.303	5	2.54	2.54	0.302	1.5	0.5
S- 3072	S- 3172	S- 3272	13.444	14.6	14.8	15	7.57	9.85	11.4	14.134	5	2.54	2.54	0.365	1.5	0.5
S- 3076	S- 3176	S- 3276	13.944	15.4	15.6	15.8	7.73	10.1	11.9	14.921	5	2.67	2.67	0.365	1.5	0.5
S- 3080	S- 3180	S- 3280	15.006	16.3	16.4	16.6	8.4	10.4	12.7	15.709	5	2.82	2.89	0.365	1.63	0.5
S- 3084	S- 3184	S- 3284	15.756	17.1	17.3	17.5	8.49	11.4	13.3	16.496	5	2.82	2.95	0.365	1.63	0.5
S- 3088	S- 3188	S- 3288	16.506	17.9	18.1	18.3	9.1	11.8	13.9	17.283	5	3.23	3.23	0.365	1.81	0.5
S- 3092	S- 3192	S- 3292	17.006	18.7	18.9	19.1	9.34	12.4	14.6	18.071	5	3.23	3.32	0.365	1.81	0.5
S- 3096	S- 3196	S- 3296	18.006	19.5	19.7	19.9	9.45	12.7	15.2	18.858	5	3.26	3.35	0.365	1.81	0.5
S-30/500	S-31/500	S-32/500	18.506	20.3	20.6	20.8	9.84	13.7	16.5	19.646	5	3.57	3.67	0.365	1.81	0.5
S-30/530	S-31/530	S-32/530	19.506	21.5	21.8	22.1	10.6	14	17.3	20.827	4	3.57	3.67	0.49	1.81	0.5
S-30/560	S-31/560	S-32/560	21.006	22.7	23	23.3	11.2	14.6	17.9	22.008	4	3.82	3.92	0.49	1.81	0.5
S-30/600	S-31/600	S-32/600	22.006	24.3	24.6	24.9	11.5	15.4	18.9	23.583	4	3.92	3.92	0.49	1.81	0.5
S-30/630	S-31/630	S-32/630	24.006	25.5	25.9	26.2	11.9	16	19.8	24.764	4	3.92	3.92	0.49	2	0.5
S-30/670	S-31/670	S-32/670	25.006	27.2	27.5	27.9	12.8	17	21	26.339	4	4.1	4.1	0.49	2	0.625
S-30/710	S-31/710	S-32/710	26.506	28.8	29.1	29.5	13.5	17.8	21.9	27.914	3	4.54	4.64	0.49	2	0.625
S-30/750	S-31/750	S-32/750	28.006	30.4	30.8	31.1	14.1	18.6	23	29.489	3	4.54	4.64	0.49	2	0.625
S-30/800	S-31/800		29.506	32.4	32.8		14.4	19		31.457	3	4.54	4.64	0.49	2	0.625
S-30/850	S-31/850		31.506	34.4	34.8		15	20		33.426	3	4.57	4.76	0.49	2	0.625
S-30/900			33.506	36.4			15.7			35.394	3	4.95	0.49		2	0.625
S-30/950			36.506	38.4			16.5			37.363	3	4.95	0.49		2	0.625