

吊升荷重

4 Lifting capacity FOR SINGLE AND DOUBLE HOOKS

Table 3 specifies the drive group as a function of hook strength class, and the lifting capacity as a function of hook number.

$$M5 - M6 \approx 2m$$

Table 3. Lifting capacity

Strength class	Drive group ¹⁾										Strength class	
M	Hooks used in a drive group lower than 1B _m are not included			1B _m	1A _m	2 _m	3 _m	4 _m	5 _m	-	-	M
P	here.			1B _m	1A _m	2 _m	3 _m	4 _m	5 _m	-	-	P
S		1B _m	1A _m	2 _m	3 _m	4 _m	-	-	-	-	-	S
T		1B _m	1A _m	2 _m	3 _m	4 _m	-	-	-	-	-	T
V	1B _m	1A _m	2 _m	3 _m	4 _m	-	-	-	-	-	-	V
Hook Number	Lifting capacity, in kg										Hook number	
006	320	250	200	160	125	100	-	-	-	-	006	
010	500	400	320	250	200	160	125	100	-	-	010	
012	630	500	400	320	250	200	160	125	100	-	012	
020	1000	800	630	500	400	320	250	200	160	125	020	
025	1250	1000	800	630	500	400	320	250	200	160	025	
04	2000	1600	1250	1000	800	630	500	400	320	250	04	
05	2500	2000	1600	1250	1000	800	630	500	400	320	05	
08	4000	3200	2500	2000	1600	1250	1000	800	630	500	08	
1	5000	4000	3200	2500	2000	1600	1250	1000	800	630	1	
1.6	8000	6300	5000	4000	3200	2500	2000	1600	1250	1000	1.6	
2.5	12500	10000	8000	6300	5000	4000	3200	2500	2000	1600	2.5	
4	20000	16000	12500	10000	8000	6300	5000	4000	3200	2500	4	
5	25000	20000	16000	12500	10000	8000	6300	5000	4000	3200	5	
6	32000	25000	20000	16000	12500	10000	8000	6300	5000	4000	6	
8	40000	32000	25000	20000	16000	12500	10000	8000	6300	5000	8	
10	50000	40000	32000	25000	20000	16000	12500	10000	8000	6300	10	
12	63000	50000	40000	32000	25000	20000	16000	12500	10000	8000	12	
16	80000	63000	50000	40000	32000	25000	20000	16000	12500	10000	16	
20	100000	80000	63000	50000	40000	32000	25000	20000	16000	12500	20	
25	125000	100000	80000	63000	50000	40000	32000	25000	20000	16000	25	
32	160000	125000	100000	80000	63000	50000	40000	32000	25000	20000	32	
40	200000	160000	125000	100000	80000	63000	50000	40000	32000	25000	40	
50	250000	200000	160000	125000	100000	80000	63000	50000	40000	32000	50	
63	320000	250000	200000	160000	125000	100000	80000	63000	50000	40000	63	
80	400000	320000	250000	200000	160000	125000	100000	80000	63000	50000	80	
100	500000	400000	320000	250000	200000	160000	125000	100000	80000	63000	100	
125	630000	500000	400000	320000	250000	200000	160000	125000	100000	80000	125	
160	800000	630000	500000	400000	320000	250000	200000	160000	125000	100000	160	
200	1000000	800000	630000	500000	400000	320000	250000	200000	160000	125000	200	
250	1250000	1000000	800000	630000	500000	400000	320000	250000	200000	160000	250	

¹⁾ Hooks to be used on cranes such as are used in steel works and rolling mills.
¹⁾ As specified in subclause 4.1 of the February 1974 edition of DIN 10020 Part 1.



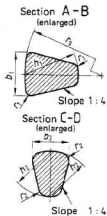
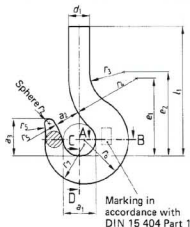
SINGLE HOOKS - DIN 15401

2.2 Type RF and type RFN

For single hooks Nos. 10 to 250

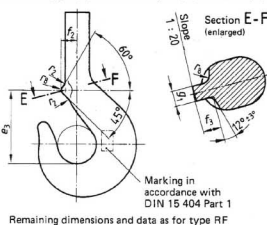
Type RF

Hammer forged (F) unmachined part (R) without nose



Type RFN

Hammer forged (F) unmachined part (R) with nose (N)



Designation of a type RFN single hook No. 20 of strength class M in accordance with DIN 15 400:
Single hook DIN 15 401 – RFN 20 – M

Table 3. Dimensions of type RF and type RFN single hooks

Single hook No.	a_1	a_2	a_3	b_1	b_2	d_1	e_1	e_2	e_3	f_2	f_3	g_1	h_1	h_2	l_1	r_1	r_2	r_3	r_4	r_5	r_6	r_7	r_8	r_9	Weight in kg
10	112	90	127	100	85	75	256	288	221	46	26	23	125	106	460	12	20	65	185	236	163	140	12	250	40
12	125	100	143	112	95	85	252	315	252	53	34	28	140	118	525	14	22	70	185	265	182	160	16	280	55
16	140	112	160	125	106	95	325	357	280	58	35	33	160	132	555	16	25	80	210	300	204	180	16	320	77
20	160	125	180	140	118	106	370	405	330	58	45	33	180	150	665	18	28	90	240	335	232	200	20	360	112
25	180	140	202	160	132	118	415	455	360	74	45	38	200	170	735	20	32	100	270	375	262	224	20	400	160
32	200	160	225	180	150	132	465	510	400	80	45	38	224	190	810	22	36	115	300	425	292	250	20	448	220
40	224	180	252	200	170	150	517	567	447	93	55	42	250	212	905	25	40	130	335	475	326	280	25	500	310
50	250	200	285	224	190	170	575	635	485	100	55	42	280	236	990	28	45	150	370	530	363	315	25	560	430
63	280	224	320	250	212	190	655	710	590	108	60	45	315	265	1120	32	50	160	420	600	408	355	25	630	600
80	315	250	358	280	236	212	727	802	598	113	60	45	355	300	1270	36	56	180	470	670	460	400	25	710	660
100	355	280	402	315	265	236	827	902	686	130	70	50	400	335	1415	40	63	200	530	750	516	450	30	800	1220
125	400	315	450	355	300	265	920	1020	790	138	70	50	450	375	1590	45	71	230	600	850	579	500	30	900	1740
160	450	355	505	400	335	300	1035	1145	825	147	70	55	500	425	1790	50	80	250	675	950	654	560	30	1000	2480
200	500	400	565	450	375	335	1150	1275	900	154	70	55	560	475	2048	56	90	265	750	1060	729	630	30	1120	3420
250	560	450	635	500	425	375	1260	1430	980	154	70	60	630	530	2305	63	100	320	840	1180	815	710	30	1260	4800

■ Specially selected for production cranes, e.g. steel works cranes and rolling mill cranes

Table 4. Permissible deviations for type RF and type RFN single hooks

Single hook No.	Permissible deviations for dimensions												
	a_1	a_2	a_3	b_1	b_2	d_1	e_3	f_2	f_3	g_1	h_1	h_2	l_1
10 to 16	$+10$ 0		± 8		$+12$ 0	$+10$ 0	± 8		$+4$ 0				$+18$ 0
20 to 32	$+12$ 0		± 10		$+16$ 0	$+12$ 0	± 10		$+5$ 0				$+20$ 0
40 to 63	$+16$ 0		± 12		$+20$ 0	$+16$ 0	± 12		$+6$ 0				$+24$ 0
80 to 125	$+20$ 0		± 16		$+26$ 0	$+20$ 0	± 16		$+8$ 0				$+32$ 0
160 to 250	$+25$ 0		± 20		$+32$ 0	$+25$ 0	± 20		$+10$ 0				$+40$ 0



2 Dimensions, designation

Unmachined parts (R) for drop forged and hammer forged ramshorn hooks with or without noses

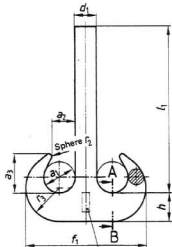
Type RS for drop forged (S) ramshorn hooks Nos. 05 to 40 without noses

Type RSN for drop forged (S) ramshorn hooks Nos. 05 to 40 with noses (N)

Type RF for hammer forged (F) ramshorn hooks Nos. 10 to 250 without noses (N)

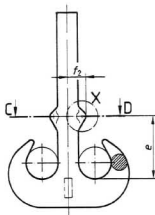
Type RFN for hammer forged (F) ramshorn hooks Nos. 10 to 250 with noses (N)

Types RS and RF



Marking in accordance with DIN 15 404 Part 1

Types RSN and RFN



Marking and remaining dimensions as for types RS and RF

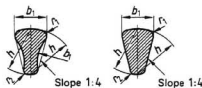
Types RS and RSN

Types RF and RFN

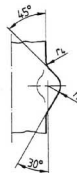
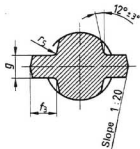
Types RSN and RFN

Detail X

Section (enlarged)



Section C - D



Designation of a type RF ramshorn hook No. 100 of strength class M:

Ramshorn hook DIN 15 402 - RF 100 - M

Should lengths l_1 differing from those specified in table 1 be required in exceptional cases, e. g. for use in conjunction with existing lifting appliances, this must be specified on ordering. The designation shall then read as follows, e. g. for $l_1 = 1500$ mm:

Ramshorn hook DIN 15 402 - RF 100 - 1500 M



Table 1. Dimensions of types RS, RSN, RF and RFN ramshorn hooks

Ramshorn hook No.	a_1	a_2	a_3	b_1	d_1	e	f_1	f_2	f_3	g	h	l_1	r_1	r_2	r_3	r_4	r_5	Weight in kg for			
																		RS	RSN	RF	RFN
■ 10	90	71	116	75	75	192	377	54	27	23	95	450	11	9	106	12	3,0	34,3	35,5	35	36,3
■ 12	100	80	130	85	85	210	421	60	27	23	106	510	12,5	10	118	12	3,0	48	49,5	49	50,5
■ 16	112	90	146	95	95	237	471	69	36	28	118	580	14	11	132	16	4,0	67,6	69,7	69	71,1
■ 20	125	100	153	106	106	265	531	75	36	33	132	650	16	12,5	150	16	4,0	95	97,5	97	99,5
■ 25	140	112	182	118	118	315	588	86	45	33	150	715	18	14	170	20	5,0	132	135	135	138
■ 32	160	125	205	132	132	335	672	94	45	38	170	790	20	16	190	20	5,0	189	193	193	197
■ 40	180	140	230	150	150	375	754	104	45	38	190	885	22	18	212	20	5,0	274	280	280	286
■ 50	200	160	260	170	170	420	842	120	56	42	212	985	25	20	236	25	6,0	—	—	388	394
■ 63	224	180	292	190	190	460	944	131	56	42	236	1090	28	22	265	25	6,0	—	—	539	547
■ 80	250	200	325	212	212	515	1062	144	56	45	265	1235	32	25	300	25	6,0	—	—	750	759
■ 100	280	224	364	236	236	575	1186	157	56	45	300	1375	36	28	335	25	6,0	—	—	1050	1060
■ 125	315	250	408	265	265	645	1330	178	68	50	335	1550	40	32	375	30	8,0	—	—	1480	1491
■ 160	355	280	458	300	300	725	1505	198	68	50	375	1745	45	36	425	30	8,0	—	—	2100	2115
■ 200	400	315	515	335	335	800	1685	218	68	55	425	1968	50	40	475	30	8,0	—	—	3000	3015
■ 250	450	355	580	375	375	875	1885	240	68	55	475	2250	56	45	530	30	8,0	—	—	4250	4268

■ Specially selected for production cranes, e. g. steel works cranes and rolling mill cranes

Table 2. Permissible deviations for types RS and RSN ramshorn hooks

Ramshorn hook No.	Permissible deviations for dimensions											
	a_1	a_2	a_3	b_1	d_1	e	f_1	f_2	h	l_1	g	f_3
05 to 2,5						$+3/0$						$+1/0$
4 and 5						$+4/0$						$+2/0$
6 and 8						$+5/0$						$+3/0$
10 to 16						$+6/0$						$+4/0$
20 to 40						$+8/0$						$+5/0$

Table 3. Permissible deviations for types RF and RFN ramshorn hooks

Ramshorn hook No.	Permissible deviations for dimensions										
	a_1	a_2	a_3	b_1	d_1	f_2	e	g	f_3	h	l_1
10 to 16	$+10/0$			± 8	$+12/0$	$+10/0$		$+4/0$			$+16/0$
20 to 32	$+12/0$			± 10	$+16/0$	$+12/0$		$+5/0$			$+20/0$
40 to 63	$+16/0$			± 12	$+20/0$	$+16/0$		$+6/0$			$+24/0$
80 to 125	$+20/0$			± 16	$+25/0$	$+20/0$		$+8/0$			$+32/0$
160 to 250	$+25/0$			± 20	$+32/0$	$+25/0$		$+10/0$			$+40/0$

