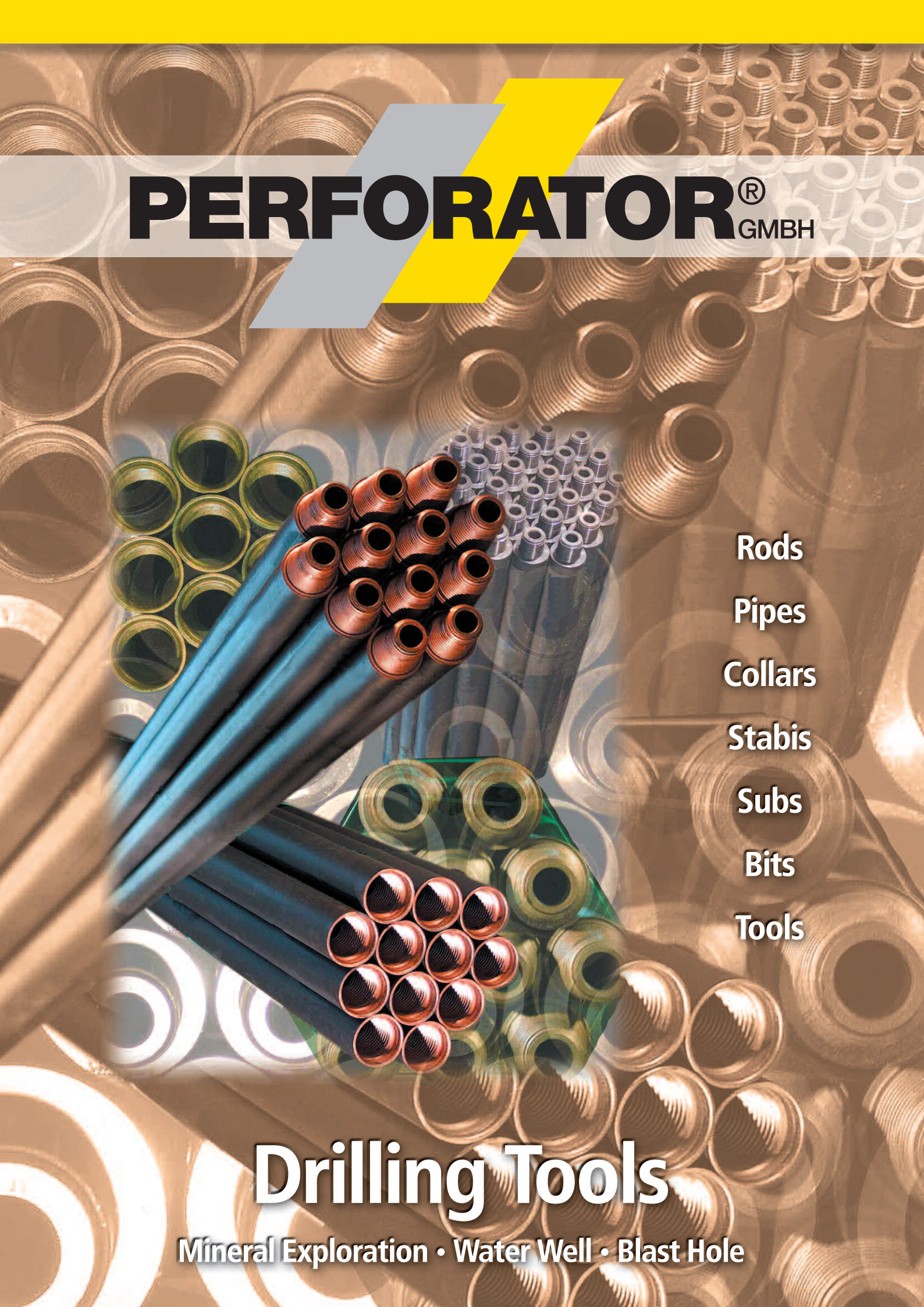




PERFORATOR[®] GMBH

Rods

Pipes

Collars

Stabis

Subs

Bits

Tools

Drilling Tools

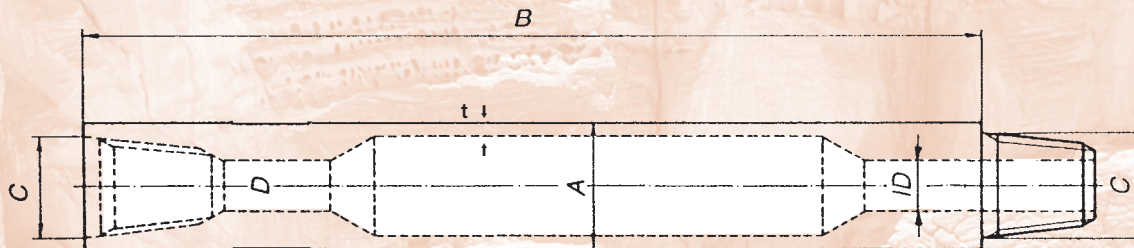
Mineral Exploration • Water Well • Blast Hole

Drill Pipes – without flats

Drehbohrstangen – ohne Schlüsselflächen

Drill Pipes listed are for all types of applications.

They are to be used for rotary drilling and suitable for down the hole drilling.



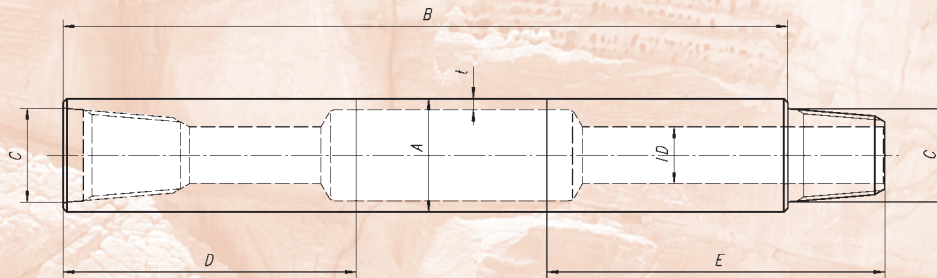
A	OD	t		C		max. machine	approx. weight	drawing
OD		wall		tool joints	ID	torque	for 3 m lenght	no.
mm	inches	mm	inches	connection	mm	(kNm)	kg	
51	2	8.1	0.317	W 51 (Tr 43.5x1/4")	22	2.5	27	VB 402.00.00-8
60.3	2 3/8	7.1	0.280	Gg 46	25	3.5	29	VB 821.00.00-7,1
63.5	2 1/2	6.3	0.248	W 63 (Tr 51x1/4")	25	3.7	30	VB 847.00.00-6,3
70	2 3/4	4.0	0.157	Gg 2"	38	3.2	23	VB 209.00.00-S-4
73	2 7/8	6.3	0.248	W 73 (Tr 63x1/4")	26	5.0	35	VB 753.00.00-6,3
76.1	3	8.8	0.346	Gg 2"	26	7.0	48	VB 790.00.00-8,8
76.1	3	6.3	0.248	API 2 3/8" REG	30	5.6	38	VB 180.00.00-6,3
76.1	3	8.8	0.346	Tr 66x1/4"	42	7.0	47	VB 35.00.00-8,8
76.1	3	8.8	0.346	W 73 (Tr 63x1/4")	26	7.0	45	VB 432.00.00-8,8
82.5	3 1/4	8.8	0.346	API 2 3/8" REG	28	8.5	55	VB 776.00.00-8,8
88.9	3 1/2	8.8	0.346	API 2 3/8" IF	32	10.1	60	VB 34.00.00-8,8
88.9	3 1/2	8.8	0.346	API 2 3/8" REG	30	10.1	58	VB 547.00.00-8,8
101.6	4	8.8	0.346	API 3 1/2" REG	38	13.7	65	VB 282.00.00-8,8
114.3	4 1/2	8.8	0.346	API 3 1/2" REG	38	17.8	78	VB 529.00.00-8,8
114.3	4 1/2	10	0.394	API 3 1/2" FH	70	19.6	85	VB 913.00.00-10
127	5	10	0.394	API 3 1/2" REG	38	24.9	99	VB 328.00.00-10
127	5	10	0.394	API 3 1/2" IF	60	24.9	99	VB 229.00.00-10
139.7	5 1/2	10	0.394	API 4 1/2" REG	57	30.8	115	VB 185.00.00-10
159	6 1/4	7.1	0.280	API 4 1/2" IF	95	30.8	102	VB 812.00.00-7,1

Drill Pipes – with long tool joints

Drehbohrstangen – mit langen Verbindern

Drill Pipes listed are for all types of applications.

They are to be used for rotary drilling and suitable for down the hole drilling.



A OD mm	OD inches	t wall	C tool joints connection	D tool joint length box	E tool joint length pin	flats	drawing no.
76,1	3	acc. design sheet	API 2 3/8" REG	230	265	no	VB 2200.00.00*
76,1	3	acc. design sheet	Gg2	300	320	no	VB 2210.00.00*
88,9	3 1/2	acc. design sheet	API 2 3/8" REG	230	265	no	VB 2201.00.00*
88,9	3 1/2	acc. design sheet	API 2 3/8" IF	230	265	no	VB 2211.00.00*
101,6	4	acc. design sheet	API 2 7/8" REG	230	280	no	VB 2205.00.00*
101,6	4	acc. design sheet	API 2 3/8" REG	230	265	no	VB 2215.00.00*
101,6	4	acc. design sheet	API 2 7/8" REG	250	250	no	VB 2225.00.00*
114,3	4 1/2	acc. design sheet	API 3 1/2" REG	240	285	no	VB 2206.00.00*

A OD mm	OD inches	t wall	C tool joints connection	D tool joint length box	E tool joint length box	flats pin	flats box	drawing no.
88,9	3 1/2	acc. design sheet	API 2 3/8" IF	230	265	sw 80	sw 80	VB 2211.00.00-S*
88,9	3 1/2	acc. design sheet	API 2 3/8" IF	230	265	sw 75	sw 75	VB 2212.00.00*
88,9	3 1/2	acc. design sheet	API 2 3/8" REG	230	265	sq 65	sq 65	VB 2202.00.00*

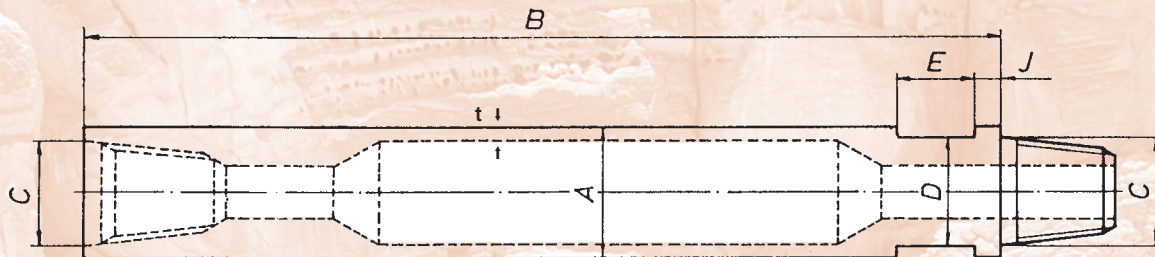
* long tool joints sw = spanner flats sq = square flats

Drill Pipes – with flats pin side

Drehbohrstangen – mit Schlüsselflächen nippelseitig

Drill Pipes listed are for all types of applications.

They are to be used for rotary drilling and suitable for down the hole drilling.



A	t	C	J	D	max.	approx.	drawing
OD	wall	tool joints	length	across	machine	weight for	no.
mm	inches	connection	shoulder mm	flat mm	torque (kNm)	3 m length kg	flats
48.3	1.9	0.157 Gg 1 3/16"	14 10	41	1.4	27	sq
51	2	0.248 Gg 1 3/16"	14 25	41	2.2	27	sq
51	2	0.248 Tr 41 x 1/4"	15 15	41	2.2	30	sw
60.3	2 3/8	0.280 Gg 46	25 13	50	3.5	30	sq
60.3	2 3/8	0.280 Gg 46	32 15	50	3.5	30	sq
60.3	2 3/8	0.280 Gg 46	25 15	50	3.5	30	sq
68	2 11/16	0.393 Tr 52 x 1/6"	25 15	–	5.8	46	key
70	2 3/4	0.346 Tr 54 x 1/4"	38 10	–	5.8	44	key
76.1	3	0.346 Gg 2"	26 10	–	7.0	51	key
76.1	3	0.346 API 2 3/8" REG	25 10	–	7.0	50	key
76.1	3	0.346 REG 61 x 1/5"	24 10	–	7.0	50	key
82.5	3 1/4	0.346 API 2 3/8" REG	25 10	–	8.5	57	key
88.9	3 1/2	0.346 API 2 3/8" REG	25 10	–	10.1	64	key
101.6	4	0.346 API 2 7/8" REG	32 10	–	13.7	77	key
114.3	4 1/2	0.393 API 3 1/2" REG	40 20	95	19.6	85	sq
127	5	0.393 API 3 1/2" REG	48 13	–	24.9	108	key
139.7	5 1/2	0.433 API 4 1/2" REG	52 18	115	33.1	127	sw
139.7	5 1/2	0.346 API 4 1/2" REG	52 10	115	27.8	105	sq

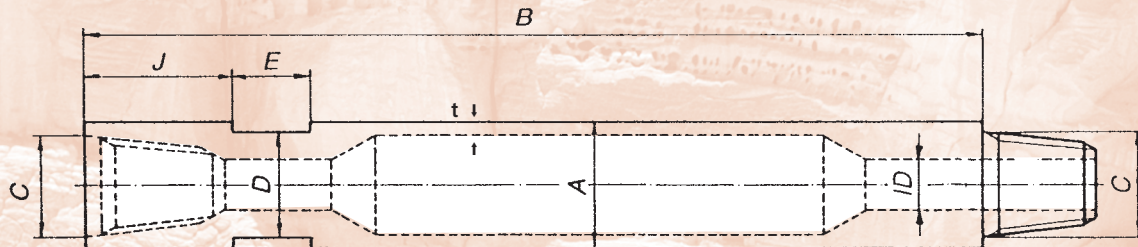
sw = spanner flats • sq = square flats • key = key flats

Drill Pipes – with flats box side

Drehbohrstangen – mit Schlüsselflächen muffenseitig

Drill Pipes listed are for all types of applications.

They are to be used for rotary drilling and suitable for down the hole drilling.



A	OD	t	C		J	D	max.	approx.		drawing
OD	inches	wall	tool joints	ID	length	across	machine	weight for	flats	no.
mm		inches	connection	mm	shoulder mm	flat mm	torque (kNm)	3 m length kg	box	
42.4	1 11/16	0.248	Rd 32 x 1/8"	5	40	32	1.4	19	sq	VB 653.00.00/I-6,3
51	2	0.248	Rd 40 x 1/6"	15	52	41	2.2	23	sq	VB 345.00.00-6,3
60.3	2 3/8	0.280	Gg 46	27	60	50	3.5	30	sq	VB 984.00.00-7,1
76.1	3	0.346	REG 61 x 1/5"	20	140	–	7.0	49	key	VB 365.00.00-8,8
76.1	3	0.346	Gg 2"	32	101	50	7.0	46	sw	VB 918.00.00-8,8
80	3 1/8	0.355	API 2 3/8" REG	28	105	–	8.0	56	key	VB 194.00.00-9,0
88.9	3 1/2	0.346	API 2 3/8" IF	32	85	67	10.1	76	sw	VB 551.00.00-8,8
88.9	3 1/2	0.346	API 2 3/8" REG	35	60	65	10.1	58	sq	VB 1115.00.00
88.9	3 1/2	0.346	API 2 3/8" IF	45	100	65	10.1	56	sq	VB 1113.00.00
127	5	0.394	API 3 1/2" REG	40	90	–	24.9	118	key	VB 288.00.00-10,0
127	5	0.394	API 3 1/2" IF	60	100	95	24.9	98	sw	VB 47.00.00-10,0
139.7	5 1/2	0.433	API 4 1/2" REG	57	170	115	33.1	115	sw	VB 780.00.00-11,0
146	5 3/4	0.394	API 3 1/2" REG	40	95	127	33.9	117	sw	VB 572.00.00-10,0

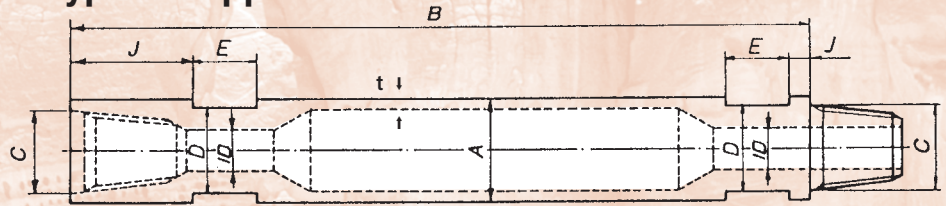
sw = spanner flats • sq = square flats • key = key flats

Drill Pipes – with flats on both sides

Drehbohrstangen – mit beidseitigen Schlüsselflächen

Drill Pipes listed are for all types of applications.

They are to be used for rotary drilling and suitable for down the hole drilling.

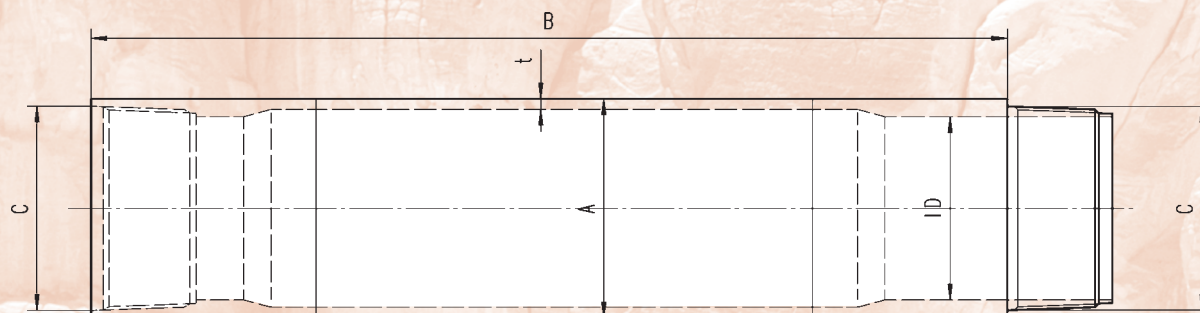


A	OD	t	C	J	D	max.	approx.	drawing		
OD	OD	wall	tool joints	ID	length shoulder	across	machine	weight for	drawing	
mm	inches	inches	connection	mm	box / pin mm	flat mm	torque (kNm)	3m length kg flats	no.	
51	2	0.248	Rd 40 x 1/6"	15	52/20	41	2.2	25	sq	VB 188.00.00-6,3
57	2 1/4	0.197	Rd 40 x 1/4"	22	57/12	42	2.4	22	sq	VB 576.00.00-5,0
60.3	2 3/8	0.280	Gg 46	27	68/15	50	3.5	30	sq	VB 91.00.00-7,1
60.3	2 3/8	0.280	Gg 46	25	80/20	—	3.5	32	key	VB 124.00.00-7,1
68	2 11/16	0.394	Tr 52 x 1/6"	25	62/20	56	5.8	45	sq	VB 219.00.00-10,0
68	2 11/16	0.157	Rd 45 x 5"	23	80/25	50	3.0	23	sq	VB 858.00.00-4,0
70	2 3/4	0.220	Gg 2"	38	85/10	50	4.2	29	sw	VB 209.00.00-5,6
70	2 3/4	0.220	Gg 1 3/4"	32	85/60	50	4.2	30	sq	VB 279.00.00-5,6
70	2 3/4	0.157	Rd 50 x 1/6"	30	60/10	50	4.2	25	sq	VB 875.00.00-4,0
76.1	3	0.248	API 2 3/8" REG	30	77/25	65	5.5	37	sq	VB 3000.00.00-6,3
76.1	3	0.346	REG 61 x 1/5"	50	90/10	—	7.0	50	key	VB 456.00.00-8,8
76.1	3	0.157	API 2 3/8" REG	30	108/10	50	3.9	24	sq	VB 785.00.00-4,0
76.1	3	0.220	Gg 2"	26	100/25	65	5.1	35	sq	VB 525.00.00-5,6
82.5	3 1/4	0.248	API 2 3/8" REG	28	85/15	70	6.6	40	sq	VB 829.00.00-6,3
88.9	3 1/2	0.248	API 2 3/8" REG	30	77/12	65	7.8	45	sq	VB 3001.00.00-6,3
88.9	3 1/2	0.157	API 2 3/8" REG	30	108/10	65	5.4	35	sq	VB 73.00.00-4,0
88.9	3 1/2	0.248	API 2 3/8" IF	32	95/13	70	7.8	46	sw	VB 202.00.00-6,3
88.9	3 1/2	0.248	Rd 70 x 1/4"	30	71/11	64	7.8	43	sq	VB 644.00.00-6,3
88.9	3 1/2	0.346	API 2 3/8" IF	45	100/13	65	10.1	56	sq	VB 1077.00.00
88.9	3 1/2	0.346	API 2 3/8" REG	35	60/15	65	10.1	58	sw	VB 1108.00.00
101.6	4	0.346	API 3 1/2" REG	45	108/19	76.2	13.7	73	sq	VB 266.00.00-8,8
101.6	4	0.346	API 2 7/8" REG	32	70/20	85	13.7	68	sq	VB 607.00.00-8,8
114.3	4 1/2	0.248	API 3 1/2" REG	38	89/25	95	13.6	63	sq	VB 3002.00.00-6,3
114.3	4 1/2	0.346	API 2 7/8" IF	54	100/30	100	17.8	78	sq	VB 539.00.00-8,8
114.3	4 1/2	0.346	API 3 1/2" IF	68	100/30	100	17.8	76	sq	VB 570.00.00-8,8
127	5	0.248	API 3 1/2" REG	38	95/20	110	17.1	73	sq	VB 3004.00.00-6,3
127	5	0.346	API 4" FH	71	90/15	110	22.5	97	sq	VB 312.00.00-8,8
127	5	0.346	API 3 1/2" IF	68	124/17	110	22.5	92	sq	VB 885.00.00-8,8
139.7	5 1/2	0.248	API 3 1/2" REG	45	95/20	115	21.0	84	sq	VB 3003.00.00-6,3
139.7	5 1/2	0.346	API 4 1/2" REG	57	95/20	115	27.8	102	sq	VB 3005.00.00-8,8
139.7	5 1/2	0.346	API 4" FH	71	90/14	110	27.8	107	sq	VB 382.00.00-8,8
152.4	6	0.346	API 3 1/2" IF	68	120/40	130	33.6	110	sq	VB 689.00.00-8,8
159	6 1/4	0.346	API 4 1/2" REG	57	95/25	130	36.9	131	sq	VB 285.00.00-8,8
177.8	7	0.346	API 6 5/8" REG	88	160/25	150	46.9	155	sq	VB 968.00.00-8,8
193.7	7 5/8	0.346	API 6 5/8" REG	90	127/30	152.4	56.4	178	sq	VB 937.00.00-8,8
203	8	0.394	API 6 5/8" REG	90	127/30	152.4	69.0	200	sq	VB 888.00.00-10,0
254	10		API 8 5/8" REG	120	175/30	200	160.0	380	sq	VB 362.00.00-16,0

Water Well Drill Pipes

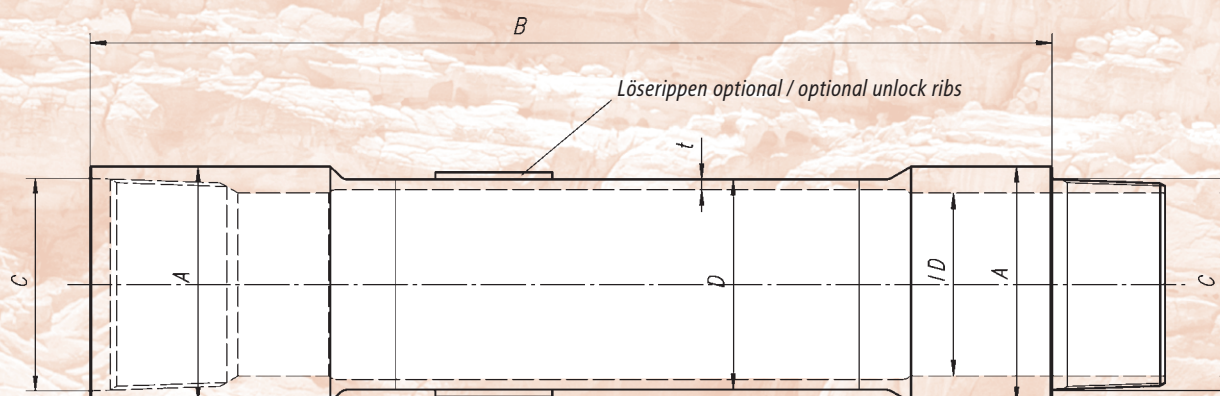
Brunnenbohrgestänge

Flush OD



A OD mm	t wall inches	C tool joints connection	ID mm	max. machine torque kNm	approx. weight for 3m length kg	drawing no
82,5	7,1	"Tr 71,5 x 1/4" "	51	7,7	29	VB 1119.00.00
95	7,1	"Tr 80,6 x 1/4" "	60	10,1	50	VB 976.00.00
146	7,1	"Tr 136 x 1/4" "	122	27,3	76	VB 1103.00.00
152,4	8	"Tr 143 x 1/4" "	125	33,1	91	VB 240.00.00

Upset OD

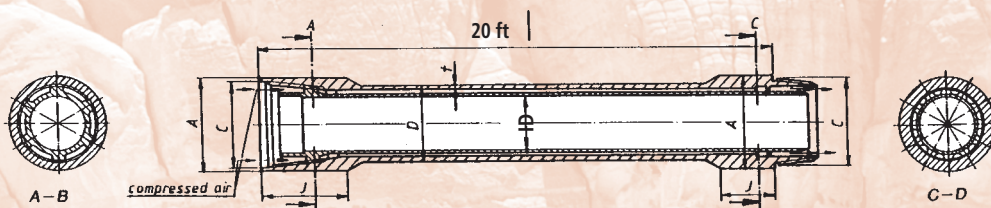


D mm	t wall mm	C tool joints connection	A OD mm	ID mm	max. machine torque kNm	approx. weight for 3m length kg	drawing no
76,1	6,3	"Tr 71,6 x 1/4" "	82,5	57,5	6,0	34	SK 10.00.00
76,1	7,1	"Tr 71,5 x 1/4" "	83	51	6,4	36	VB 184.00.00
82,5	6,3	"Tr 84 x 1/4" "	95	66	7,0	40	SK 11.00.00
101,6	4,5	"Tr 94 x 1/5" "	106	72	8,3	38	VB 1131.00.00
114,3	5,6	"Tr 114 x 1/4" "	128	81,5	13,1	54	VB 1141.00.00
114,3	4,5	"Rd 138,2 x 1/4" "	150	103,2	10,8	46	VB 1140.00.00
114,3	6,3	"Tr 117 x 1/4" "	125	98,3	14,5	55	SK 14.00.00
146	6,3	"Tr 146 x 1/4" "	159	127	24,6	73	SK 12.00.00
146	7,1	"Tr 146 x 1/4" "	164	127	27,3	85	VB 41.00.00

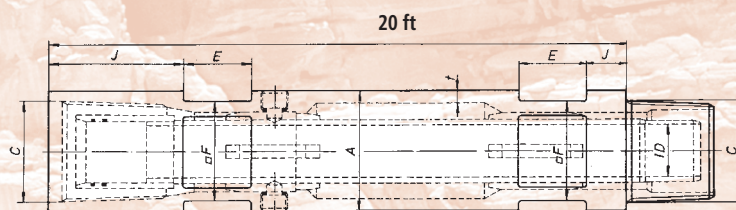
- auf Kundenwunsch mit angeschweißten Löserippen / on request with unlock ribs welded on
- auf Kundenwunsch mit Schlüsselflächen / on request with spanner flats

Reverse Circulation Drill Pipes

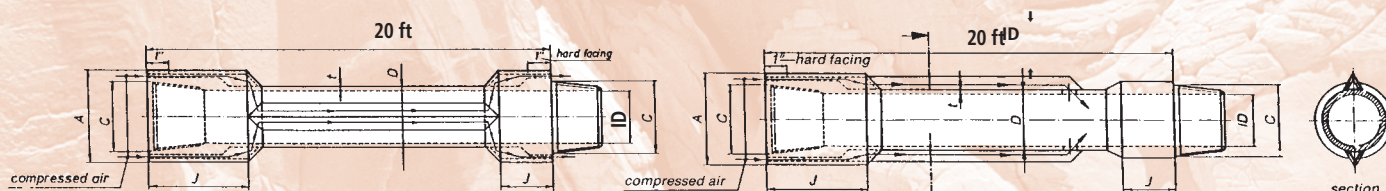
Lufthebestangen



D inches	t wall inches	C tool joints connection	J length shoulder box inches	pin inches	A OD inches	ID inches	max. machine torque (kNm)	approx. weight unit lbs	kg	drawing no.
3 1/4	0.288	API 3 1/2 IF	6	4	5 1/4	2 3/8	7.3	258	117.5	VB 93.00.00
3 1/2	0.288	API 4 FH	6	4	5 1/4	2 5/8	8.6	286	130	VB 115.00.00
4	0.288	API 4 IF	6	4	5 3/4	3 3/16	11.6	358	163	VB 135.00.00
4 1/4	0.304	API 4 1/2 IF	6	4	6 3/4	3 9/16	14.6	438	199	VB 100.00.00
4 1/4	0.304	API 4 1/2 FH	6	4	6	2 15/16	14.6	409	186	VB 116.00.00
5	0.304	API 5 1/2 FH	7	5	7	4 1/8	20.9	468	213	VB 117.00.00
5 1/2	0.304	API 5 1/2 IF	7	5	7 3/8	4 3/4	25.7	633	288	VB 101.00.00
6 1/4	0.288	API 6 5/8 FH-short	7 7/8	4 3/4	7 5/16	4 11/16	30.7	638	290	VB 239.00.00
6 1/4	0.288	API 6 5/8 FH-short	8 1/4	5 1/4	6 1/4	4	30.7	598	272	VB 620.00.00



D inches	t wall inches	C tool joints connection	J length shoulder box inches	pin inches	F ID inches	max. machine torque (kNm)	approx. Weight unit lbs	kg	drawing no.
3 1/2	0.37	Tr 76 x 1 1/4"	3 15/16	3 15/16	2 15/16 1 9/16	11.0	323	147	VB 574.00.00
4 1/2	0.37	API 3 1/2 IF	3 15/16	3 15/16	3 15/16 2 1/16	19.6	391	178	VB 575.00.00
4 1/2	0.37	Tr 102 x 1 1/4"	3 15/16	5 5/16	3 15/16 2 1/4	19.6	391	178	VB 582.00.00

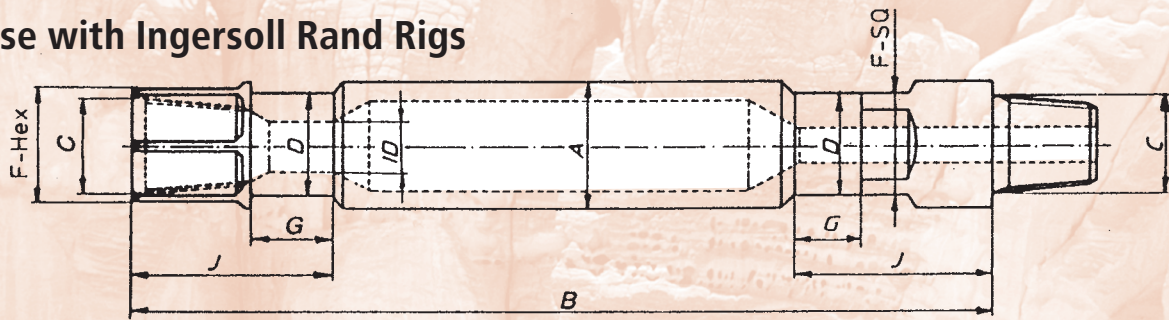


D inches	t wall inches	C tool joints connection	J length shoulder box inches	pin inches	A OD inches	ID inches	max machine torque (kNm)	approx. weight unit lbs	kg	drawing no.
4	0.248	Tr 108.8 x 1 1/4"	3 15/16	3 15/16	6 1/2	3 5/8	10.5	273	124	VB 458.00.00
4 1/2	0.248	Tr 108.8 x 1 1/4"	3 15/16	3 15/16	6 1/2	3 5/8	13.6	343	156	VB 464.00.00
5 1/2	0.394	API 5 1/2 IF	10 1/4	5 5/16	8 3/4	4 3/4	30.8	598	272	VB 24.00.00
6 1/4	0.315	Tr 180.15 x 1 1/4"	10 1/4	5 5/16	8 3/4	4 3/4	34.0	682	310	VB 233.00.00
8 5/8	0.347	API-S5 9/4 x 1 1/4"	12 1/2	7 1/2	11 1/2	8	44.0	950	430	VB 323.00.00

Drill Pipes – special design with hex. wrench flats

Drehbohrstangen

For use with Ingersoll Rand Rigs

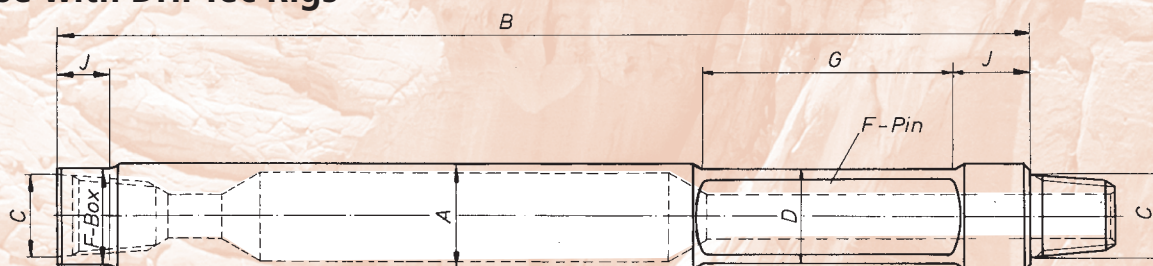


A	C	J	F-Hex	F-SQ	D	G	drawing					
OD	wall	tool joints	ID	length shoulder to flat								
inches	inches	connection	max.	pin	box	inches	inches					
						box	pin					
3 1/2	0.346	API 2 3/8 REG	1 1/8	8 7/8	8 1/2	3	2 1/2	2 1/2	2 1/2	3 1/2	3 1/4	VB 794.00.00
4 1/2	0.346	API 2 7/8 IF	2 1/8	8 7/8	8 1/16	4	3 1/2	3 1/2	3 1/2	3	2 3/4	VB 77.00.00
4 1/2	0.346	API 3 1/2 REG	1 3/4	8 3/8	8 1/16	4	3 1/2	3 1/2	3 1/4	3	2 1/2	VB 104.00.00
4 1/2	0.346	API 3 1/2 REG	1 3/4	8 3/8	8 1/16	4	3 1/2	3 1/2	3 1/2	3	2 1/8	VB 383.00.00
4 1/2	0.346	API 2 7/8 REG	1 1/4	8 3/8	8 1/16	4	3 1/2	3 1/2	3 1/4	3	2 1/2	VB 125.00.00
5	0.394	API 3 1/2 REG	1 7/8	8 5/8	8	4	3 1/2	3 1/2	3 1/2	3 1/2	3 5/8	VB 962.00.00
5	0.4	API 3 1/2 REG	1 3/4	8 5/8	8 1/16	4	3 1/2	3 1/2	3 1/4	3 1/8	3 1/8	VB 293.00.00
5	0.5	API 3 1/2 REG	1 3/4	8 3/8	8 1/2	4	3 5/8	3 1/2	3 1/2	3 1/2	3 5/16	VB 907.00.00
5	0.5	API 3 1/2 REG	1 11/16	5 5/16	4 1/2	4	3 1/2	—	—	—	2	VB 536.00.00
5 1/2	0.42	API 4 FH	2 1/2	8 9/16	8 3/16	5	4 1/2	4 1/2	4 1/4	3 1/8	3	VB 484.00.00
5 1/2	0.5	3 1/2" BECO	1 5/8	8 1/8	11	5	4 1/2	4 1/2	4 1/4	3 1/8	3	VB 983.00.00

Basic dimensions, special combinations available on request.

Please advise: drill pipe length, wall thickness, thread type and size, wrenches, tubing OD.

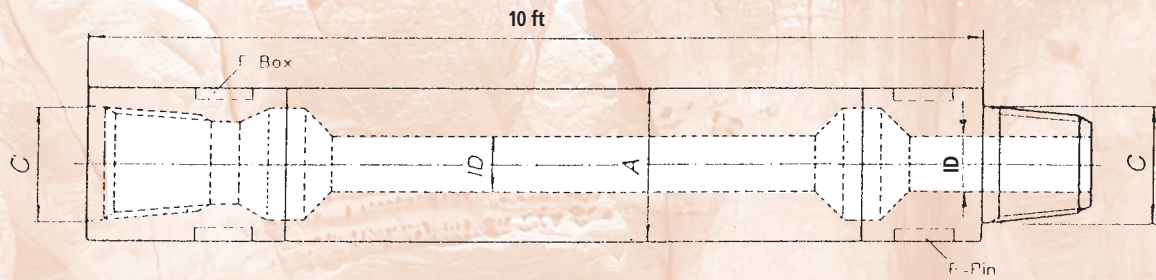
For use with Drill Tec Rigs



A	C	J	F-box	F-pin	D	G	drawing			
OD	wall	tool joints	ID	length shoulder to flat	sw	sw	no.			
inches	inches	connection	max.	pin	inches	inches	inches			
3 1/2	0.37	API 2 3/8 IF	1 3/4	3 1/4	2 1/4	3 1/4	2 3/4	—	12 1/2	VB 985.00.00
4	0.33	API 2 3/8 IF	1 3/4	3 1/4	2 1/4	3 1/2	2 3/4	—	12 1/2	VB 986.00.00
4 1/2	0.33	API 2 7/8 IF	2	3 1/4	2 1/4	4	3	—	12 1/2	VB 987.00.00
4 1/2	0.5	API 3 1/2 REG	1 3/4	3 1/4	2 1/4	4	3	—	12 1/2	VB 988.00.00
5	0.5	API 3 1/2 REG	1 1/2	3 1/4	2 1/4	4	3	4 1/2	12 1/2	VB 989.00.00
5	0.37	API 3 1/2 REG	2 1/4	3 1/4	2 1/4	4 5/8	3	4 1/2	12 1/2	VB 990.00.00
6	0.5	API 3 1/2 REG	1 3/4	3 1/4	2 1/4	4	3	4 1/2	12 1/2	VB 991.00.00

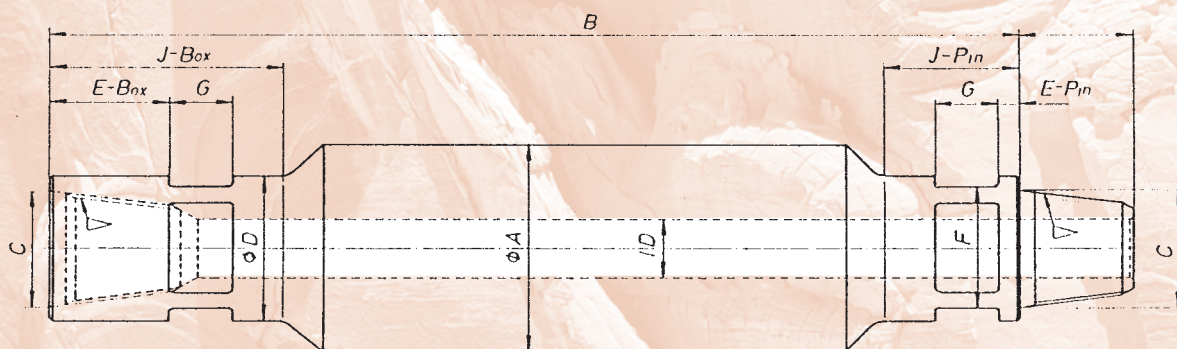
Drill Collars

Schwerstangen



A	C	F-Box	F-Pin	approx.	drawing
OD	tool joints			weight unit	no.
inches	connection	inches	inches	lbs	kg
3 1/2	API 2 3/8 REG	1 1/8	—	260	118
3 1/2	API 2 7/8 REG	1 1/4	2 3/4	260	118
3 1/2	API 2 3/8 IF	1 1/2	—	260	118
4 1/4	API 2 7/8 IF	2 1/16	—	374	170
4 1/2	API 3 1/2 REG	1 1/2	3 3/4	418	190
4 3/4	API 3 1/2 IF	2 11/16	—	392	178
5 1/2	API 4 FH	2 13/16	—	638	290
6	API 4 1/2 REG	2 1/4	5 1/8	739	336
6	API 3 1/2 FH	2 7/16	—	739	336
6	API 4 1/2 IF	3 3/4	—	572	260
6 1/4	API 4 IF	3 1/4	—	763	347
8	API 5 1/2 REG	2 3/4	—	1247	567
8	API 6 5/8 REG	3 1/2	—	1247	567

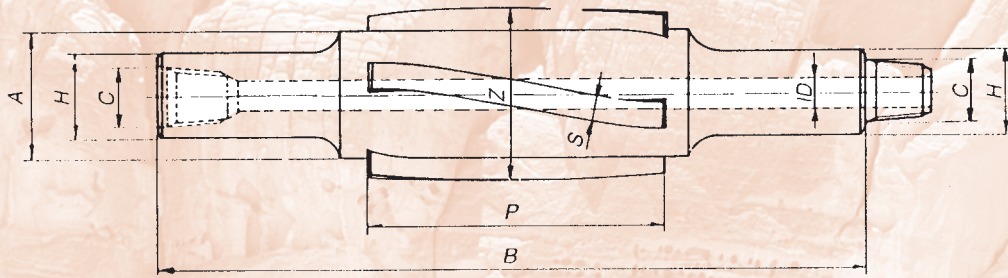
Design on request / Auf Anfrage



Ribs with hard banding

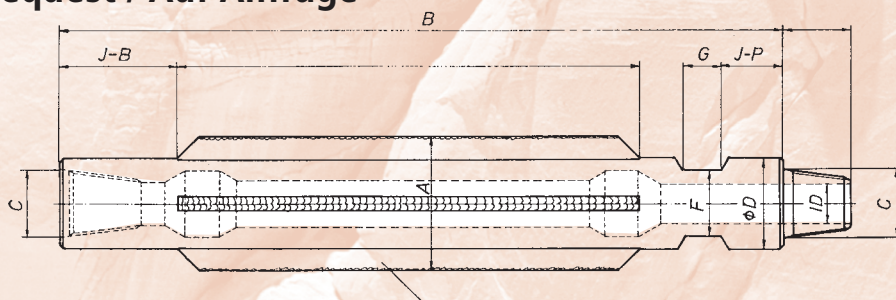
Stabilizers

Stabilisatoren



drill hole	Z		C	A	B	S	H	ID	P	drawing
dia inches	inches	mm	connection	inches	inches	inches	inches	inches	inches	no.
5 6/8	5 5/8	142.8	API 2 7/8 IF	4 1/2	40	1 3/16	4 1/2	2 1/16	10	VPI-Z 14.05.00 / 40" / 5 6/8"
5 6/8	5 5/8	142.8	API 3 1/2 REG	4 1/2	40	1 3/16	4 1/2	1 1/2	10	VPI-Z 16.02.00 / 40" / 5 6/8"
6	5 3/4	146	API 2 7/8 IF	4 1/2	40	1 3/16	4 1/2	2 1/16	10	VPI-Z 14.05.00 / 40" / 6"
6	5 3/4	146	API 3 1/2 REG	4 1/2	40	1 3/16	4 1/2	1 1/2	10	VPI-Z 16.02.00 / 40" / 6"
6 1/4	6	152.4	API 3 1/2 REG	4 1/2	40	1 3/16	4 1/2	1 1/2	10	VPI-Z 16.02.00 / 40" / 6 1/4"
6 1/4	6	152.4	API 2 7/8 IF	4 1/2	40	1 3/16	4 1/2	2 1/16	10	VPI-Z 14.05.00 / 40" / 6 1/4"
6 3/4	6 1/2	165	API 3 1/2 IF	5 1/2	40	1 3/16	5 1/2	2 5/16	10	VPI-Z 23.24.00 / 40" / 6 3/4"
7 3/8	7 1/8	181	API 3 1/2 IF	5 1/2	40	1 3/16	5 1/2	2 5/16	10	VPI-Z 23.24.00 / 40" / 7 3/8"
8 1/2	8 1/4	216	API 3 1/2 IF	6	42	1 3/16	5 1/2	2 5/16	12	VPI-Z 23.02.00 / 42" / 8 1/2"
8 1/2	8 1/4	216	API 4 1/2 REG	8	42	1 3/16	5 1/2	2 1/4	12	VPI-Z 32.03.00 / 42" / 8 1/2"
9 7/8	9 5/8	244.5	API 3 1/2 IF	8	42	1 3/16	5 1/2	2 5/16	13	VPI-Z 23.02.00 / 42" / 9 7/8"
9 7/8	9 5/8	244.5	API 4 1/2 REG	8	42	1 3/16	5 1/2	2 1/4	13	VPI-Z 32.08.00 / 42" / 9 7/8"
11	10 3/4	273	API 3 1/2 IF	8	42	1 3/16	5 1/2	2 5/16	13	VPI-Z 23.02.00 / 42" / 11"
11	10 3/4	273	API 4 1/2 REG	8	42	1 3/16	5 1/2	2 1/4	13	VPI-Z 32.08.00 / 42" / 11"
11	10 3/4	273	API 6 5/8 REG	9	54	2	7 3/4	3 1/2	24	VPI-Z 55.06.00 / 54" / 11"
12 1/4	12	304.8	API 4 1/2 REG	8	44	1 3/16	5 1/2	2 1/4	14	VPI-Z 32.09.00 / 44" / 12 1/4"
12 1/4	12	304.8	API 3 1/2 IF	8	44	1 3/16	5 1/2	2 5/16	14	VPI-Z 23.03.00 / 44" / 12 1/4"
12 1/4	12	304.8	API 6 5/8 REG	9	54	2	7 3/4	3 1/2	24	VPI-Z 55.06.00 / 54" / 12 1/4"
13 3/4	13 1/2	342.9	API 3 1/2 IF	8	44	1 3/16	5 1/2	2 5/16	14	VPI-Z 23.03.00 / 44" / 13 3/4"
13 3/4	13 1/2	342.9	API 4 1/2 REG	8	44	1 3/16	5 1/2	2 1/4	14	VPI-Z 32.09.00 / 44" / 13 3/4"
14 3/4	14 1/2	368.3	API 3 1/2 IF	8	44	1 3/16	5 1/2	2 5/16	14	VPI-Z 23.03.00 / 44" / 14 3/4"
15	14 3/4	374.6	API 3 1/2 IF	8	51	1 3/16	5 1/2	2 5/16	21	VPI-Z 23.04.00 / 51" / 15"
15	14 3/4	374.6	API 6 5/8 REG	9	54	2	7 3/4	3 1/2	24	VPI-Z 55.06.00 / 54" / 15"
17 1/2	17 1/4	444.5	API 6 5/8 REG	9	54	2	7 3/4	3 1/2	24	VPI-Z 55.06.00 / 54" / 17 1/2"
20	19 1/2	508	API 6 5/8 REG	9	54	2	7 3/4	3 1/2	24	VPI-Z 55.06.00 / 54" / 20"

Design on request / Auf Anfrage



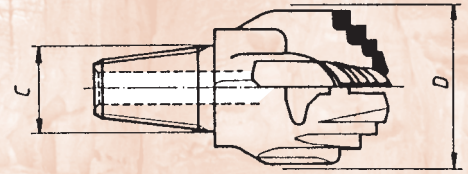
Bits

Bohrschneiden und -meißel

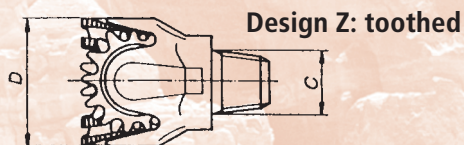
Carbide Blade Bits

Bits are principally used for exploration.

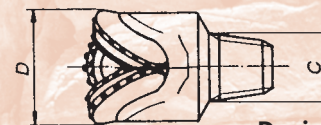
D diameter inches mm	C connection pin hole	weight		drawing no.	
		lbs	kg		
3 7/8	98	API 2 3/8 REG	6.8	3.1	BZ 232.01.00 / 3 7/8"
4 1/4	108	API 2 3/8 REG	8.8	3.1	BZ 232.01.00 / 4 1/4"
4 1/2	114.3	API 2 3/8 REG	10.3	4.7	BZ 232.01.00 / 4 1/2"
5	127	API 2 3/8 REG	16	7.3	BZ 232.01.00 / 5"
5 5/8	143	API 2 3/8 REG	21	9.5	BZ 232.01.00 / 5 5/8"
6	152.4	API 3 1/2 REG	26	12	BZ 635.15.00 / 6"
6 3/4	171.5	API 3 1/2 REG	33	15	BZ 635.15.00 / 6 3/4"
7 3/8	187.3	API 3 1/2 REG	41	18.5	BZ 635.15.00 / 7 3/8"



Steel Tooth Rock Bits



D diameter inches mm	C connection pin hole	weight		drawing no.	
		lbs	kg		
3 7/8	98	API 2 3/8 REG	7.5	3.4	BZ 232.05.00 / 3 7/8"-Z
4 1/2	114.3	API 2 3/8 REG	11	5	BZ 232.05.00 / 4 1/2"-Z
5	127	API 2 7/8 REG	15	6.8	BZ 297.01.00 / 5"-Z
5 5/8	143	API 3 1/2 REG	22	10	BZ 635.21.00 / 5 5/8"-Z
6 1/4	158.7	API 3 1/2 REG	30	13.6	BZ 635.21.00 / 6 1/4"-Z
7 3/8	187.3	API 3 1/2 REG	42	19.1	BZ 635.21.00 / 7 3/8"-Z
8 1/2	215.9	API 4 1/2 REG	75	34	BZ 636.19.00 / 8 1/2"-Z



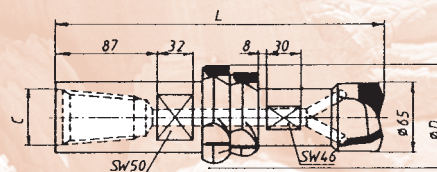
Design W: wart-studded

Tungsten Carbide Bits

Bits are available for soft, medium and hard formation and for fluid, air, jet circulation.

Remark: Other sizes on request!

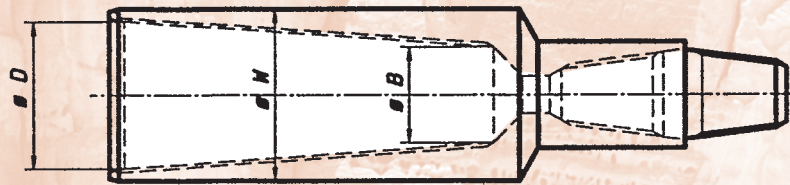
Multi-Stage Rotary Drill Bits



type	suitable for drill pipe	C connection	D	drawing no.				
SK-L S 60	Salzgitter	Ø 60 Tr 50 x 1/6"	X	3 11/32"	3 3/4"	4 9/64"	4 17/32"	5 1/8"
SK-L H 68	Hausherr	Ø 68 Tr 52 x 1/6"		X	X	X	X	X
SK-L T 51	Turmag	Ø 51 Rd 40 x 1/6"	X	X	X	X	X	X
SK-L B 70	Böhler	Ø 70 Rd 50 x 1/6"		X	X	X	X	X
SK-L H 76	Hausherr	Ø 76 API 2 3/8 REG			X	X	X	X
SK-L W 73	Wirth	Ø 73 Tr 63 x 1/4"			X	X	X	X
SK-L B 90	Böhler	Ø 90 Rd 70 x 1/4"				X	X	X
SK-L S 76	Salzgitter	Ø 76 Gg 2"			X	X	X	X
SK-L W 63	Wirth	Ø 63 Tr 51 x 1/4"		X	X	X	X	X
SK-L S 63	Salzgitter	Ø 63 Tr 50. 48 x 1/4"		X	X	X	X	X

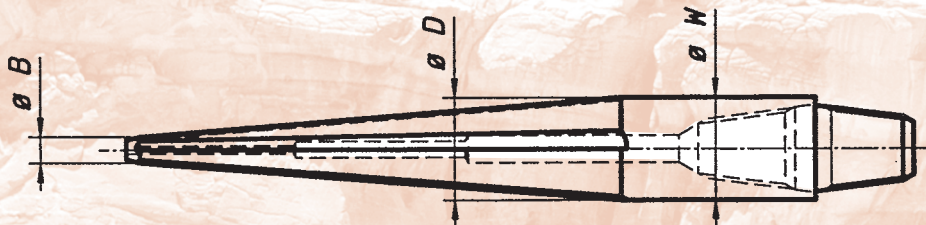
Diameter to be advised!

Overshots with female or male thread – RH or LH (to be advised)



Size Größe	Range / Fangbereich mm	OD inch	Size Größe	Range / Fangbereich mm	OD inch
I	76.1 – 25.4	3 – 1	III c	101.6 – 50.8	4 – 2
I a	58 – 38		IV	139.7 – 88.9	5 1/2 – 3 1/2
II	88.9 – 38.1	3 1/2 – 1 1/2	VI a	127.0 – 76.1	5 – 3
II a	76.1 – 38.1	3 – 1 1/2	V	165.1 – 114.3	6 1/2 – 4 1/2
II e	50 – 77		VI	190.5 – 139.7	7 1/2 – 5 1/2
III	114.3 – 63.5	4 1/2 – 2 1/2	VII	216.0 – 165.1	8 1/2 – 6 1/2
III a	114.3 – 38.1	4 1/2 – 1 1/2	VIII	241.3 – 190.5	9 1/2 – 7 1/2
III b	101.6 – 38.1	4 – 1 1/2	IX	266.7 – 216.0	10 1/2 – 8 1/2

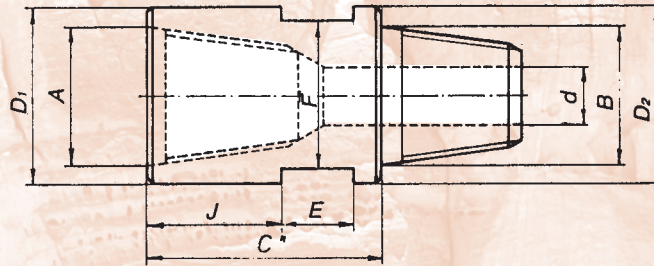
Taper Taps with female or male thread – RH or LH (to be advised)



Size Größe	Range / Fangbereich mm	OD inch	Size Größe	Range / Fangbereich mm	OD inch
I	25.4 – 88.9	1 – 3 1/2	III a	50.8 – 127	2 – 5
I a	10 – 51		III b	38.1 – 127	1 1/2 – 5
I b	12 – 60.3		IV	63.5 – 139.7	2 1/2 – 5 1/2
I c	12 – 63.5		V	88.9 – 165.1	3 1/2 – 6 1/2
I d	15 – 70		V a	101.6 – 177.8	4 – 7
I e	18 – 73		VI	114.3 – 190.5	4 1/2 – 7 1/2
I f	19 – 76.1		VII	139.7 – 216	5 1/2 – 8 1/2
I g	19 – 80		VIII	165.1 – 241.3	6 1/2 – 9 1/2
II	25.4 – 101.6	1 – 4	IX	190.5 – 266.7	7 1/2 – 10 1/2
III	38.1 – 114.3	1 1/2 – 4 1/2			

Subs Box – Pin

Übergangsstücke

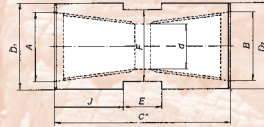


connection box up A	Pin down B	length C* inches	length shoulder J inches	width spanner flats E inches	std. bore d inches	outside diameter top D1 inches	outside diameter bottom D2 inches	across flat F inches	drawing no.
API 2 3/8 REG	API 3 1/2 REG	5 3/4	1 9/16	2	1 1/2	3 1/2	4 1/2	2 3/4	BZ 21.01.00
API 2 3/8 REG	API 2 3/8 IF	5 5/16	1 9/16	2	1 1/2	3 1/2	3 1/2	2 3/4	BZ 21.02.00
API 2 3/8 REG	API 2 7/8 REG	5 5/16	1 9/16	2	1 1/4	3 1/2	3 1/2	2 3/4	BZ 21.03.00
API 2 7/8 REG	API 2 3/8 REG	5 5/16	2 3/4	2	1 1/4	3 1/2	3 1/2	2 3/4	BZ 12.07.00
API 2 7/8 REG	API 2 7/8 IF	4 5/16	1 3/8	2	1 1/2	4 1/2	4 1/2	3 7/8	BZ 12.08.00
API 2 7/8 REG	API 3 1/2 IF	6 1/2	3 3/4	2	1 3/4	4 1/2	5 1/2	3 7/8	BZ 12.09.00
API 2 7/8 REG	API 3 1/2 REG	5 5/16	1 9/16	2	1 3/4	4 1/2	4 1/2	3 7/8	BZ 12.10.00
API 2 7/8 REG	API 4 1/2 REG	6 7/8	3 15/16	2	1 3/4	4 1/2	5 3/4	3 7/8	BZ 12.11.00
API 3 1/2 REG	API 2 7/8 REG	5 1/8	1 9/16	2	1 1/4	4 1/2	4 1/2	3 7/8	BZ 356.01.00
API 3 1/2 REG	API 2 7/8 REG	5 1/8	1 9/16	2	1 1/2	4 1/2	4 1/2	3 7/8	BZ 356.03.00
API 3 1/2 REG	API 4 1/2 FH	5 7/16	1 9/16	2	2 5/16	4 1/2	5 3/4	3 7/8	BZ 356.04.00
API 3 1/2 REG	API 3 1/2 IF	5 7/16	1 9/16	2	1 3/4	4 1/2	5 1/2	3 7/8	BZ 356.05.00
API 3 1/2 REG	API 4 1/2 REG	5 5/16	1 9/16	2	2 1/16	4 1/2	5 3/4	3 7/8	BZ 356.06.00
API 3 1/2 REG	API 6 5/8 REG	15	4 1/2	2	2 5/16	4 1/2	8	3 7/8	BZ 356.10.00
API 3 1/2 REG	API 2 3/8 IF	5 3/4	1 9/16	2	1 1/2	4 1/2	3 1/2	3 7/8	BZ 356.07.00
API 3 1/2 REG	API 3 1/2 REG	4	1 9/16	2	1 3/4	5	5	3 7/8	BZ 356.08.00
API 3 1/2 REG	API 2 3/8 REG	5 3/4	1 9/16	2	1	4 1/2	3 1/2	3 7/8	BZ 356.09.00
API NC 35	API 2 7/8 REG	5 5/16	2 1/2	2	2 1/4	4 1/2	4 1/2	2 7/8	BZ 20.01.00
API NC 35	API 2 7/8 IF	5 5/16	2 1/2	2	2 1/16	4 1/2	4 1/2	2 7/8	BZ 20.02.00
API NC 35	API 3 1/2 IF	6 1/4	3 5/8	2	2 5/16	4 1/2	5 1/2	2 7/8	BZ 20.03.00
API NC 35	AP 3 1/2 REG	5 3/4	3 3/4	2	1 3/4	4 1/2	4 1/2	2 7/8	BZ 20.04.00
API NC 35	API NC 35	6 1/2	3 3/4	2	2 5/16	4 1/2	4 1/2	2 7/8	BZ 20.05.00
API NC 35	API 4 1/2 REG	7	3 3/4	2	2 1/16	4 1/2	5 3/4	2 7/8	BZ 20.06.00
API NC 35	API 6 5/8 REG	9	4 1/2	2	2 5/16	4 1/2	8	2 7/8	BZ 20.08.00
API 4 1/2 REG	API 3 1/2 REG	6 1/4	3	2	1 3/4	5 3/4	4 1/2	4 3/4	BZ 30.01.00
API 6 5/8 REG	API NC 35	9	4 1/2	2	2 5/16	7 3/4	5 3/4	7	BZ 20.18.00
API 6 5/8 REG	API 4 1/2 REG	10	5	2	2 5/16	7 3/4	5 3/4	7	BZ 636.20.00

* Sizes obligatory. Length of sub can be altered on request.

Subs Box – Box

Übergangsstücke



connection box up A	pin down B	length C* inches	length shoulder J inches	width spanner flats E inches	std. bore d inches	outside top D ₁ inches	diameter bottom D ₂ inches	across flat F inches	drawing no.
API 2 3/8 REG	API 2 3/8 REG	8 5/8	2 1/4	2	1 1/2	3 1/2	3 1/2	2 3/4	BZ 21.04.00
API 2 3/8 REG	API 3 1/2 REG	5 1/16	2 1/4	2	1 1/2	3 1/2	4 1/2	2 3/4	BZ 21.05.00-I
API 2 7/8 REG	API 2 3/8 REG	8 5/8	2 3/4	2	1 1/2	4 1/2	3 1/2	3 7/8	BZ 21.21.00
API 2 7/8 REG	API 2 7/8 IF	9 1/2	2 3/4	2	1 3/4	4 1/2	4 1/2	3 7/8	BZ 12.02.00
API 2 7/8 REG	API 3 1/2 REG	9 1/2	2 3/4	2	1 3/4	4 1/2	4 1/2	3 7/8	BZ 12.03.00
API 2 7/8 REG	API 3 1/2 IF	9 7/8	3	2	1 3/4	3 1/2	5 1/2	3 7/8	BZ 12.04.00
API 2 7/8 REG	API 4 1/2 REG	9 7/8	3	2	1 3/4	4 1/2	5 3/4	3 7/8	BZ 12.05.00
API 2 7/8 REG	API 4 1/2 FH	9 7/8	3	2	1 3/4	4 1/2	5 3/4	3 7/8	BZ 12.06.00
API 3 1/2 REG	API 3 1/2 REG	9 1/2	2 3/4	2	1 3/4	4 1/2	4 1/2	3 7/8	BZ 356.12.00
API 3 1/2 REG	API 3 1/2 IF	10 5/8	3 1/2	2	1 3/4	4 1/2	5 1/2	3 7/8	BZ 356.13.00
API 3 1/2 REG	API 4 1/2 REG	10 5/8	3 1/2	2	2 5/16	4 1/2	5 3/4	3 7/8	BZ 356.14.00
API 3 1/2 REG	API 4 1/2 FH	10 5/8	3 1/2	2	2 5/16	4 1/2	5 3/4	3 7/8	BZ 356.15.00
API 3 1/2 REG	API 6 5/8 REG	11 1/4	3 1/2	2	2 5/16	4 1/2	7 3/4	3 7/8	BZ 356.16.00
API NC 35	API 3 1/2 REG	9 7/8	3 1/2	2	1 3/4	4 1/2	4 1/2	3 7/8	BZ 20.10.00
API NC 35	API 3 1/2 IF	10 5/8	4	2	2 5/16	4 1/2	5 1/2	3 7/8	BZ 20.11.00
API NC 35	API 4 1/2 REG	10 5/8	4	2	2 5/16	4 1/2	5 3/4	3 7/8	BZ 20.12.00
API NC 35	API 4 1/2 FH	10 5/8	4	2	2 5/16	4 1/2	5 3/4	3 7/8	BZ 20.13.00
API NC 35	API 6 5/8 REG	11 1/2	4 1/2	2	2 5/16	4 1/2	5 3/4	3 7/8	BZ 20.14.00

* Sizes obligatory. Length of sub can be altered on request.

Subs Pin – Pin

Übergangsstücke



connection box up A	pin down B	length C** inches	length shoulder J inches	width spanner flats E inches	std. bore d inches	outside top D ₁ inches	diameter bottom D ₂ inches	across flat F inches	drawing no.
Tr 51 x 1 1/4"-W	Tr 51 x 1/4"-W	2 3/4	3/8	1 9/16	1	2 1/2	2 1/2	2 3/16	BZ 847.08.00
Fl 36 x 1 1/4"-C	Tr 63 x 1/4"-W	2 1/4	3/8	1 9/16	7/8	1 11/16	2 7/8	2 9/16	BZ 753.13.00
Fl 41.5 x 1 1/3"-C	Tr 63 x 1/4"-W	2 1/4	3/8	1 9/16	7/8	2	2 7/8	2 9/16	BZ 753.12.00
Tr 66 x 1/4"-S	Tr 66 x 1/4"-S	14 5/8	3/4	1 3/16	1 9/16	3 1/8	3 1/8	2 9/16	BZ 35.06.00
Tr 66 x 1/4"-S	Tr 75 x 1/4"-S	9 1/2	7 1/4	1 9/16	1 9/16	3	3 1/2	2 7/8	BZ 35.01.00
API 2 3/8 IF	Tr 75 x 1/4"-S	9 1/2	7 1/2	1 3/8	1 1/4	3 1/2	3 1/2	2 7/8	BZ 34.03.00
API 2 3/8 REG	API 2 7/8 REG	6	2	2	1	3 1/2	3 1/2	2 3/4	BZ 21.06.00
API 3 1/2 REG	API 3 1/2 REG	7	2 1/2	2	1 3/4	4 1/2	4 1/2	3 7/8	BZ 356.17.00
API 3 1/2 REG	API NC 35	7	2 1/2	2	1 3/4	4 1/2	5 1/2	3 7/8	BZ 356.18.00
API 3 1/2 REG	API 3 1/2 IF	8	3	2	1 3/4	4 1/2	5 1/2	3 7/8	BZ 356.19.00
API 3 1/2 REG	API 4 1/2 REG	3 5/8	1/2	2 3/4	1 1/2	4 1/2	5 1/2	3 3/4	BZ 635.16.00
API 4 1/2 REG	API 4 1/2 REG	3 1/4	1	2	2 1/4	5 1/2	5 1/2	4 3/4	BZ 636.02.00
API 4 1/2 REG	API 6 5/8 REG	4 3/4	21/32	2	2 1/4	5 1/2	7 1/8	4 17/32	BZ 636.04.00

** Sizes obligatory. Length of sub can be altered on request.