

Shaped charges with the maximum operating temperature up to 150°C

Charge type	Explosive weight, g	Penetration depth in concrete, API, RP 19B (mm)	Entrance Hole diameter, API, RP 19B (mm)	Penetration depth in concrete, TU, minimum (mm)	Entrance hole diameter, TU, minimum (mm)
Shaped charges for hollow-carrier expendable perforating systems					
ZPK 38-AT-M-03	3,5			270	5,5
ZPK 50-AT-M-03	5,5	608,0	5,56	610	5,5
ZPK 50-AT-M-10	6,7	154,0	12,27	155	12,0
ZPK 63-AT-M-03	11,5	636,0	7,97	630	8,0
ZPK 63-AT-M-04	11,7	753,0	7,69	750	8,0
ZPK 63-AT-M-10	14,0	249,0	19,93	250	19,0
ZPK 73-AT-M-01	18,0			650	12,0
ZPK 73-AT-M-02	19,0	319,0	20,83	320	21,0
ZPK 73-AT-M-04	18,0	785,0	9,43	780	10,0
ZPK73-AT-M-07	17,7			350	15,5
ZPK 89-AT-M-01	31,7			650	14,5
ZPK 89-AT-M-03	27,7	1025,0	11,07	1000	11,0
ZPK 89-AT-M-04	27,5	1284,0	9,79	1300	10,0
ZPK89-AT-M-07	29,7			360	18,0
ZPK 89-AT-M-09	27,2	356,8	18,69	360	19,0
ZPK 89-AT-M-10	22,5	262,0	23,42	260	23,5
ZPK 102-AT-M-03	27,8	1245,0	12,28	1250	12,0
ZPK 102-AT-M-04	27,7	1400,0	9,70	1400	10,0
ZPK 102-AT-M-07	28,0			360	18,0
ZPK 102-AT-M-09	27,2	365,9	18,93	370	19,0
ZPK 102-AT-M-10	27,5	175,0	22,35	200	23,0
ZPK114-AT-M-01	31,7			1000	12,7
ZPK 114-AT-M-03	32,5	1348	12,50	1350	12,0
ZPK 114-AT-M-04	32,7	1620,0	10,78	1600	11,0
ZPK 114-AT-M-07	28,0			360	18,0
ZPK 114-AT-M-09	27,5			440	19,7
ZPK 114-AT-M-10	27,5	189,0	23,92	200	24,0
SKIF-C-50-01	6,5			300	5,5
SKIF-M-50-01	6,5			150	11,0
SKIF-C-63-01	11,5			425	7,0
SKIF-M-63-01	15,0			400	14,5
SKIF-C-73-01	18,0			550	10,0
SKIF-M-73-01	20,0			500	17,0
SKIF-C-Y01	27,5			800	11,0
SKIF-M-Y01	27,0			625	18,5
Shaped charges for capsule-type expendable perforating systems					
ZPK43-AT (Link)	9,7	6,31	510	500	5,5
ZPK54-AT (Link)	12,7	8,55	761	700	6,5
ZPK43-AT (Strip)	9,7	6,73	518	500	5,5
ZPK54-AT (Strip)	12,7	8,47	659	700	6,5

Shaped charges with the maximum operating temperature up to 204°C

Charge type	Explosive weight, g	Penetration depth in concrete, API, RP 19B (mm)	Entrance Hole diameter, API, RP 19B (mm)	Penetration depth in concrete, TU, minimum (mm)	Entrance hole diameter, TU, minimum (mm)
ZPK38-AT-M-03	3,5	257	5,62	270	5,5
ZPK50-AT-M-03 T	6,0	645	6,12	640	6,0
ZPK50-AT-M-10 T	6,2			155	12,0
ZPK63-AT-M-03 T	11,5			630	8,0
ZPK63-AT-M-04 T	11,7			750	8,0
ZPK63-AT-M-10 T	14,0			250	19,0
ZPK73-AT-M-01 T	18,0			700	12,3
ZPK73-AT-M-02 T	18,2	279	20,68	280	21,0
ZPK73-AT-M-04 T	18,0	896	11,24	850	11,0
ZPK73-AT-M-07 T	17,7			360	16,5
ZPK89-AT-M-01 T	32,5	638	13,77	650	15,0
ZPK89-AT-M-03 T	29,0			1050	11,0
ZPK89-AT-M-04 T	28,0	1226	10,12	1300	10,0
ZPK89-AT-M-07 T	29,7			370	18,5
ZPK89-AT-M-10 T	22,5	197	20,24	270	24,0
ZPK102-AT-M-03 T	29,7			1300	12,3
ZPK102-AT-M-04 T	31,5	1712	11,15	1450	10,0
ZPK102-AT-M-07 T	27,5			370	18,5
ZPK102-AT-M-09 T	28,0			370	19,0
ZPK102-AT-M-10 T	26,0			220	25,0
ZPK114-AT-M-01 T	32,0			1000	12,7
ZPK114-AT-M-03 T	34,0			1350	12,0
ZPK114-AT-M-04 T	35,5	1813	11,60	1600	11,0
ZPK114-AT-M-07 T	27,5			370	18,5
ZPK114-AT-M-09 T	28,7			450	23,0
ZPK114-AT-M-10 T	28,5	246	24,33	250	25,0