



## LFTA HIGH PERFORMANCE

✚ High performance and self-centering geometry. Featuring top quality HSS/Co+PV10 and very versatile cutting geometry, enables outstanding performance on a wide range of materials.

🇮🇹 Alto rendimento e affilatura autocentrante. Costruita con HSS/Co+PV10 di alta qualità e caratterizzata da una geometria di taglio molto versatile, garantisce elevate prestazioni su una vasta gamma di materiali.

🇩🇪 Hohe Leistungen und selbstzentrierende Schnittgeometrie. Aus hervorragendem HSS/Co mit PV10 Beschichtung. Dank der vielseitigen Geometrie, sind hohe Leistungen auf einem sehr breiten Spektrum von Materialien möglich.

🇫🇷 Haute performance et affûtage auto-centré. Fabriquée en HSS/Co+PV10 de la plus haute qualité et caractérisée par une géométrie de coupe très polyvalente, elle garantit des performances excellentes dans une grande variété de matériaux.

🇪🇸 Broca de alto rendimiento con afilado autocentrante. Fabricada en HSS/Co con recubrimiento PV10, gracias a su geometría de corte muy versátil, permite lograr un altísimo rendimiento en una gama muy amplia de materiales.

🇷🇺 Высокопроизводительная и самоцентрирующаяся геометрия. Использование HSS/Co высочайшего качества с покрытием PV10 и универсальная геометрия, позволяет получить повышенную производительность на широком спектре обрабатываемых материалов.

INFO
TYPHOON TA-HTA-4HTA
TYPHOON PU-HPU
TYPHOON SUH
TYPHOON ALH
TYPHOON HRC
TYPHOON SUH MINI
TYPHOON HL
C-SD-TA
LFTA
SUTA
HSS/HSS/CO DRILLS
G2
MDTA
HF VH/UP
MEF
ALU
MEX
UH
HSS/CO-HSSP END MILLS
CARBIDE BURRS

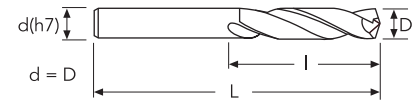
# 218LFTA

self-centering, general purpose, extra-short



P	M	K	N	S	H
★	☆	★	☆		

★ 1st choice ☆ suitable



D(h8)	D Tol.	d(h7)	I	L	PACKAGING	EDP No.	Stock
2.00	0/-0.014	2	12	38	5	P218LFTA0200	●
2.10	0/-0.014	2.1	12	38	5	P218LFTA0210	●
2.20	0/-0.014	2.2	13	40	5	P218LFTA0220	●
2.30	0/-0.014	2.3	13	40	5	P218LFTA0230	●
2.40	0/-0.014	2.4	14	43	5	P218LFTA0240	●
2.50	0/-0.014	2.5	14	43	5	P218LFTA0250	●
2.60	0/-0.014	2.6	14	43	5	P218LFTA0260	●
2.70	0/-0.014	2.7	16	46	5	P218LFTA0270	●
2.80	0/-0.014	2.8	16	46	5	P218LFTA0280	●
2.90	0/-0.014	2.9	16	46	5	P218LFTA0290	●
3.00	0/-0.014	3	16	46	5	P218LFTA0300	●
3.10	0/-0.018	3.1	18	49	5	P218LFTA0310	●
3.20	0/-0.018	3.2	18	49	5	P218LFTA0320	●
3.30	0/-0.018	3.3	18	49	5	P218LFTA0330	●
3.40	0/-0.018	3.4	20	52	5	P218LFTA0340	●
3.50	0/-0.018	3.5	20	52	5	P218LFTA0350	●
3.60	0/-0.018	3.6	20	52	5	P218LFTA0360	●
3.70	0/-0.018	3.7	20	52	5	P218LFTA0370	●
3.80	0/-0.018	3.8	22	55	5	P218LFTA0380	●
3.90	0/-0.018	3.9	22	55	5	P218LFTA0390	●
4.00	0/-0.018	4	22	55	5	P218LFTA0400	●
4.10	0/-0.018	4.1	22	55	5	P218LFTA0410	●
4.20	0/-0.018	4.2	22	55	5	P218LFTA0420	●
4.30	0/-0.018	4.3	24	58	5	P218LFTA0430	●
4.40	0/-0.018	4.4	24	58	5	P218LFTA0440	●
4.50	0/-0.018	4.5	24	58	5	P218LFTA0450	●
4.60	0/-0.018	4.6	24	58	5	P218LFTA0460	●
4.70	0/-0.018	4.7	24	58	5	P218LFTA0470	●
4.80	0/-0.018	4.8	26	62	5	P218LFTA0480	●
4.90	0/-0.018	4.9	26	62	5	P218LFTA0490	●
5.00	0/-0.018	5	26	62	5	P218LFTA0500	●
5.10	0/-0.018	5.1	26	62	5	P218LFTA0510	●
5.20	0/-0.018	5.2	26	62	5	P218LFTA0520	●
5.30	0/-0.018	5.3	26	62	5	P218LFTA0530	●
5.40	0/-0.018	5.4	28	66	5	P218LFTA0540	●
5.50	0/-0.018	5.5	28	66	5	P218LFTA0550	●
5.60	0/-0.018	5.6	28	66	5	P218LFTA0560	●
5.70	0/-0.018	5.7	28	66	5	P218LFTA0570	●
5.80	0/-0.018	5.8	28	66	5	P218LFTA0580	●

● stock standard ○ non-standard stock ▽ stock exhaustion

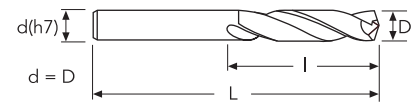
# 218LFTA

self-centering, general purpose, extra-short



P	M	K	N	S	H
★	☆	★	☆		

★ 1st choice ☆ suitable



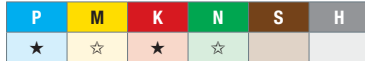
D(h8)	D Tol.	d(h7)	I	L	PACKAGING	EDP No.	Stock
5.90	0/-0.018	5.9	28	66	5	P218LFTA0590	●
6.00	0/-0.018	6	28	66	5	P218LFTA0600	●
6.10	0/-0.022	6.1	31	70	5	P218LFTA0610	●
6.20	0/-0.022	6.2	31	70	5	P218LFTA0620	●
6.30	0/-0.022	6.3	31	70	5	P218LFTA0630	●
6.40	0/-0.022	6.4	31	70	5	P218LFTA0640	●
6.50	0/-0.022	6.5	31	70	5	P218LFTA0650	●
6.60	0/-0.022	6.6	31	70	5	P218LFTA0660	●
6.70	0/-0.022	6.7	31	70	5	P218LFTA0670	●
6.80	0/-0.022	6.8	34	74	5	P218LFTA0680	●
6.90	0/-0.022	6.9	34	74	5	P218LFTA0690	●
7.00	0/-0.022	7	34	74	5	P218LFTA0700	●
7.10	0/-0.022	7.1	34	74	5	P218LFTA0710	●
7.20	0/-0.022	7.2	34	74	5	P218LFTA0720	●
7.30	0/-0.022	7.3	34	74	5	P218LFTA0730	●
7.40	0/-0.022	7.4	34	74	5	P218LFTA0740	●
7.50	0/-0.022	7.5	34	74	5	P218LFTA0750	●
7.60	0/-0.022	7.6	37	79	5	P218LFTA0760	●
7.70	0/-0.022	7.7	37	79	5	P218LFTA0770	●
7.80	0/-0.022	7.8	37	79	5	P218LFTA0780	●
7.90	0/-0.022	7.9	37	79	5	P218LFTA0790	●
8.00	0/-0.022	8	37	79	5	P218LFTA0800	●
8.10	0/-0.022	8.1	37	79	5	P218LFTA0810	●
8.20	0/-0.022	8.2	37	79	5	P218LFTA0820	●
8.30	0/-0.022	8.3	37	79	5	P218LFTA0830	●
8.40	0/-0.022	8.4	37	79	5	P218LFTA0840	●
8.50	0/-0.022	8.5	37	79	5	P218LFTA0850	●
8.60	0/-0.022	8.6	40	84	5	P218LFTA0860	●
8.70	0/-0.022	8.7	40	84	5	P218LFTA0870	●
8.80	0/-0.022	8.8	40	84	5	P218LFTA0880	●
8.90	0/-0.022	8.9	40	84	5	P218LFTA0890	●
9.00	0/-0.022	9	40	84	5	P218LFTA0900	●
9.10	0/-0.022	9.1	40	84	5	P218LFTA0910	●
9.20	0/-0.022	9.2	40	84	5	P218LFTA0920	●
9.30	0/-0.022	9.3	40	84	5	P218LFTA0930	●
9.40	0/-0.022	9.4	40	84	5	P218LFTA0940	●
9.50	0/-0.022	9.5	40	84	5	P218LFTA0950	●
9.60	0/-0.022	9.6	43	89	5	P218LFTA0960	●
9.70	0/-0.022	9.7	43	89	5	P218LFTA0970	●

INFO
TYPHOON TA-HTA-4HTA
TYPHOON PU-HPU
TYPHOON SUH
TYPHOON ALH
TYPHOON HRC
TYPHOON SUH MINI
TYPHOON HL
C-SD-TA
LFTA
SUTA
HSS-HSS/CO DRILLS
G2
MDTA
HF VH/UP
MEF
ALU
MEX
UH
HSS/CO-HSSP END MILLS
CARBIDE BURRS

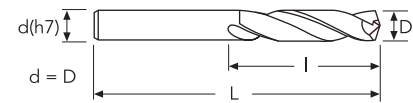
● stock standard ○ non-standard stock ▽ stock exhaustion

# 218LFTA

self-centering, general purpose, extra-short



★ 1st choice ☆ suitable



D(h8)	D Tol.	d(h7)	I	L	PACKAGING	EDP No.	Stock
<b>9.80</b>	0/-0.022	9.8	43	89	5	P218LFTA0980	●
<b>9.90</b>	0/-0.022	9.9	43	89	5	P218LFTA0990	●
<b>10.00</b>	0/-0.022	10	43	89	5	P218LFTA1000	●
<b>10.20</b>	0/-0.027	10.2	43	89	1	P218LFTA1020	●
<b>10.30</b>	0/-0.027	10.3	43	89	1	P218LFTA1030	●
<b>10.50</b>	0/-0.027	10.5	43	89	1	P218LFTA1050	●
<b>10.80</b>	0/-0.027	10.8	47	95	1	P218LFTA1080	●
<b>11.00</b>	0/-0.027	11	47	95	1	P218LFTA1100	●
<b>11.20</b>	0/-0.027	11.2	47	95	1	P218LFTA1120	●
<b>11.30</b>	0/-0.027	11.3	47	95	1	P218LFTA1130	●
<b>11.50</b>	0/-0.027	11.5	47	95	1	P218LFTA1150	●
<b>11.80</b>	0/-0.027	11.8	47	95	1	P218LFTA1180	●
<b>12.00</b>	0/-0.027	12	51	102	1	P218LFTA1200	●
<b>12.20</b>	0/-0.027	12.2	51	102	1	P218LFTA1220	●
<b>12.50</b>	0/-0.027	12.5	51	102	1	P218LFTA1250	●
<b>12.80</b>	0/-0.027	12.8	51	102	1	P218LFTA1280	●
<b>13.00</b>	0/-0.027	13	51	102	1	P218LFTA1300	●
<b>13.30</b>	0/-0.027	13.3	54	107	1	P218LFTA1330	●
<b>13.50</b>	0/-0.027	13.5	54	107	1	P218LFTA1350	●
<b>13.80</b>	0/-0.027	13.8	54	107	1	P218LFTA1380	●
<b>14.00</b>	0/-0.027	14	54	107	1	P218LFTA1400	●
<b>14.50</b>	0/-0.027	14.5	56	111	1	P218LFTA1450	●
<b>14.80</b>	0/-0.027	14.8	56	111	1	P218LFTA1480	●
<b>15.00</b>	0/-0.027	15	56	111	1	P218LFTA1500	●
<b>15.30</b>	0/-0.027	15.3	56	111	1	P218LFTA1530	●
<b>15.50</b>	0/-0.027	15.5	58	115	1	P218LFTA1550	●
<b>15.80</b>	0/-0.027	15.8	58	115	1	P218LFTA1580	●
<b>16.00</b>	0/-0.027	16	58	115	1	P218LFTA1600	●
<b>16.50</b>	0/-0.027	16.5	60	119	1	P218LFTA1650	●
<b>17.00</b>	0/-0.027	17	60	119	1	P218LFTA1700	●
<b>17.50</b>	0/-0.027	17.5	62	123	1	P218LFTA1750	●
<b>18.00</b>	0/-0.027	18	62	123	1	P218LFTA1800	●
<b>18.50</b>	0/-0.033	18.5	64	127	1	P218LFTA1850	●
<b>19.00</b>	0/-0.033	19	64	127	1	P218LFTA1900	●
<b>19.50</b>	0/-0.033	19.5	66	131	1	P218LFTA1950	●
<b>20.00</b>	0/-0.033	20	66	131	1	P218LFTA2000	●

● stock standard ○ non-standard stock ▽ stock exhaustion

## 218LFTA

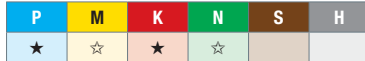
Material Group ISO 513	P1 P2			P3 P4			M1 M2					
Hardness/Rm	500-700 N/mm <sup>2</sup>			600-1000 N/mm <sup>2</sup>			< 750 N/mm <sup>2</sup>					
Vc (m/min)	40-50			30-40			18-22					
D (mm)	n (rpm)	fn (mm/rev)	Vf (mm/min)	n (rpm)	fn (mm/rev)	Vf (mm/min)	n (rpm)	fn (mm/rev)	Vf (mm/min)			
2	7170	0.060	430	5570	0.051	280	3180	0.042	130			
3	4780	0.084	400	3720	0.071	270	2120	0.059	120			
4	3580	0.108	390	2790	0.092	260	1590	0.076	120			
5	2870	0.132	380	2230	0.112	250	1270	0.092	120			
6	2390	0.156	370	1860	0.133	250	1060	0.109	120			
7	2050	0.180	370	1590	0.153	240	910	0.126	110			
8	1790	0.204	370	1390	0.173	240	800	0.143	110			
9	1590	0.228	360	1240	0.194	240	710	0.160	110			
10	1430	0.252	360	1110	0.214	240	640	0.176	110			
11	1300	0.276	360	1010	0.235	240	580	0.179	100			
12	1190	0.300	360	930	0.255	240	530	0.195	100			
13	1100	0.324	360	860	0.275	240	490	0.204	100			
14	1020	0.348	350	800	0.296	240	450	0.219	100			
15	960	0.372	360	740	0.316	230	420	0.223	90			
16	900	0.396	360	700	0.337	240	400	0.238	100			
17	840	0.420	350	660	0.357	240	370	0.252	90			
18	800	0.444	360	620	0.377	230	350	0.266	90			
19	750	0.468	350	590	0.398	230	340	0.281	100			
20	720	0.492	350	560	0.418	230	320	0.295	90			

Material Group ISO 513	K1 K2			N1 N2			N3 N4					
Hardness/Rm	150-350 HB											
Vc (m/min)	30-40			65-75			45-55					
D (mm)	n (rpm)	fn (mm/rev)	Vf (mm/min)	n (rpm)	fn (mm/rev)	Vf (mm/min)	n (rpm)	fn (mm/rev)	Vf (mm/min)			
2	5570	0.057	320	11150	0.066	740	7960	0.060	480			
3	3720	0.080	300	7430	0.092	690	5310	0.084	450			
4	2790	0.103	290	5570	0.119	660	3980	0.108	430			
5	2230	0.125	280	4460	0.145	650	3180	0.132	420			
6	1860	0.148	280	3720	0.172	640	2650	0.156	410			
7	1590	0.171	270	3180	0.198	630	2270	0.180	410			
8	1390	0.194	270	2790	0.224	630	1990	0.204	410			
9	1240	0.217	270	2480	0.251	620	1770	0.228	400			
10	1110	0.239	270	2230	0.277	620	1590	0.252	400			
11	1010	0.262	260	2030	0.304	620	1450	0.276	400			
12	930	0.285	270	1860	0.330	610	1330	0.300	400			
13	860	0.308	260	1710	0.356	610	1220	0.324	400			
14	800	0.331	260	1590	0.383	610	1140	0.348	400			
15	740	0.353	260	1490	0.409	610	1060	0.372	390			
16	700	0.376	260	1390	0.436	610	1000	0.396	400			
17	660	0.399	260	1310	0.462	610	940	0.420	390			
18	620	0.422	260	1240	0.488	610	880	0.444	390			
19	590	0.445	260	1170	0.515	600	840	0.468	390			
20	560	0.467	260	1110	0.541	600	800	0.492	390			

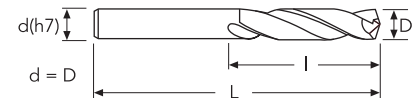
- INFO
- TYPHOON TA-HTA-4HTA
- TYPHOON PU-HPU
- TYPHOON SUH
- TYPHOON ALH
- TYPHOON HRC
- TYPHOON SUH MINI
- TYPHOON HL
- C-SD-TA
- LFTA
- SUTA
- HSS-HSS/CO DRILLS
- G2
- MDTA
- HF VH/UP
- MEF
- ALU
- MEX
- UH
- HSS/CO-HSSP END MILLS
- CARBIDE BURRS

# 238LFTA

self-centering, general purpose, short



★ 1st choice ☆ suitable



D(h8)	D Tol.	d(h7)	I	L	PACKAGING	EDP No.	Stock
2.00	0/-0.014	2	24	49	5	P238LFTA0200	●
2.10	0/-0.014	2.1	24	49	5	P238LFTA0210	●
2.20	0/-0.014	2.2	27	53	5	P238LFTA0220	●
2.30	0/-0.014	2.3	27	53	5	P238LFTA0230	●
2.40	0/-0.014	2.4	30	57	5	P238LFTA0240	●
2.50	0/-0.014	2.5	30	57	5	P238LFTA0250	●
2.60	0/-0.014	2.6	30	57	5	P238LFTA0260	●
2.70	0/-0.014	2.7	33	61	5	P238LFTA0270	●
2.80	0/-0.014	2.8	33	61	5	P238LFTA0280	●
2.90	0/-0.014	2.9	33	61	5	P238LFTA0290	●
3.00	0/-0.014	3	33	61	5	P238LFTA0300	●
3.10	0/-0.018	3.1	36	65	5	P238LFTA0310	●
3.20	0/-0.018	3.2	36	65	5	P238LFTA0320	●
3.30	0/-0.018	3.3	36	65	5	P238LFTA0330	●
3.40	0/-0.018	3.4	39	70	5	P238LFTA0340	●
3.50	0/-0.018	3.5	39	70	5	P238LFTA0350	●
3.60	0/-0.018	3.6	39	70	5	P238LFTA0360	●
3.70	0/-0.018	3.7	39	70	5	P238LFTA0370	●
3.80	0/-0.018	3.8	43	75	5	P238LFTA0380	●
3.90	0/-0.018	3.9	43	75	5	P238LFTA0390	●
4.00	0/-0.018	4	43	75	5	P238LFTA0400	●
4.10	0/-0.018	4.1	43	75	5	P238LFTA0410	●
4.20	0/-0.018	4.2	43	75	5	P238LFTA0420	●
4.30	0/-0.018	4.3	47	80	5	P238LFTA0430	●
4.40	0/-0.018	4.4	47	80	5	P238LFTA0440	●
4.50	0/-0.018	4.5	47	80	5	P238LFTA0450	●
4.60	0/-0.018	4.6	47	80	5	P238LFTA0460	●
4.70	0/-0.018	4.7	47	80	5	P238LFTA0470	●
4.80	0/-0.018	4.8	52	86	5	P238LFTA0480	●
4.90	0/-0.018	4.9	52	86	5	P238LFTA0490	●
5.00	0/-0.018	5	52	86	5	P238LFTA0500	●
5.10	0/-0.018	5.1	52	86	5	P238LFTA0510	●
5.20	0/-0.018	5.2	52	86	5	P238LFTA0520	●
5.30	0/-0.018	5.3	52	86	5	P238LFTA0530	●
5.40	0/-0.018	5.4	57	93	5	P238LFTA0540	●
5.50	0/-0.018	5.5	57	93	5	P238LFTA0550	●
5.60	0/-0.018	5.6	57	93	5	P238LFTA0560	●
5.70	0/-0.018	5.7	57	93	5	P238LFTA0570	●
5.80	0/-0.018	5.8	57	93	5	P238LFTA0580	●

● stock standard ○ non-standard stock ▽ stock exhaustion



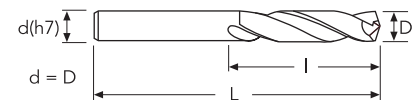
# 238LFTA

self-centering, general purpose, short



P	M	K	N	S	H
★	☆	★	☆		

★ 1st choice ☆ suitable



D(h8)	D Tol.	d(h7)	I	L	PACKAGING	EDP No.	Stock
5.90	0/-0.018	5.9	57	93	5	P238LFTA0590	●
6.00	0/-0.018	6	57	93	5	P238LFTA0600	●
6.10	0/-0.022	6.1	63	101	1	P238LFTA0610	●
6.20	0/-0.022	6.2	63	101	1	P238LFTA0620	●
6.30	0/-0.022	6.3	63	101	1	P238LFTA0630	●
6.40	0/-0.022	6.4	63	101	1	P238LFTA0640	●
6.50	0/-0.022	6.5	63	101	1	P238LFTA0650	●
6.60	0/-0.022	6.6	63	101	1	P238LFTA0660	●
6.70	0/-0.022	6.7	63	101	1	P238LFTA0670	●
6.80	0/-0.022	6.8	69	109	1	P238LFTA0680	●
6.90	0/-0.022	6.9	69	109	1	P238LFTA0690	●
7.00	0/-0.022	7	69	109	1	P238LFTA0700	●
7.10	0/-0.022	7.1	69	109	1	P238LFTA0710	●
7.20	0/-0.022	7.2	69	109	1	P238LFTA0720	●
7.30	0/-0.022	7.3	69	109	1	P238LFTA0730	●
7.40	0/-0.022	7.4	69	109	1	P238LFTA0740	●
7.50	0/-0.022	7.5	69	109	1	P238LFTA0750	●
7.60	0/-0.022	7.6	75	117	1	P238LFTA0760	●
7.70	0/-0.022	7.7	75	117	1	P238LFTA0770	●
7.80	0/-0.022	7.8	75	117	1	P238LFTA0780	●
7.90	0/-0.022	7.9	75	117	1	P238LFTA0790	●
8.00	0/-0.022	8	75	117	1	P238LFTA0800	●
8.10	0/-0.022	8.1	75	117	1	P238LFTA0810	●
8.20	0/-0.022	8.2	75	117	1	P238LFTA0820	●
8.30	0/-0.022	8.3	75	117	1	P238LFTA0830	●
8.40	0/-0.022	8.4	75	117	1	P238LFTA0840	●
8.50	0/-0.022	8.5	75	117	1	P238LFTA0850	●
8.60	0/-0.022	8.6	81	125	1	P238LFTA0860	●
8.70	0/-0.022	8.7	81	125	1	P238LFTA0870	●
8.80	0/-0.022	8.8	81	125	1	P238LFTA0880	●
8.90	0/-0.022	8.9	81	125	1	P238LFTA0890	●
9.00	0/-0.022	9	81	125	1	P238LFTA0900	●
9.10	0/-0.022	9.1	81	125	1	P238LFTA0910	●
9.20	0/-0.022	9.2	81	125	1	P238LFTA0920	●
9.30	0/-0.022	9.3	81	125	1	P238LFTA0930	●
9.40	0/-0.022	9.4	81	125	1	P238LFTA0940	●
9.50	0/-0.022	9.5	81	125	1	P238LFTA0950	●
9.60	0/-0.022	9.6	87	133	1	P238LFTA0960	●
9.70	0/-0.022	9.7	87	133	1	P238LFTA0970	●

INFO
TYPHOON TA-HTA-4HTA
TYPHOON PU-HPU
TYPHOON SUH
TYPHOON ALH
TYPHOON HRC
TYPHOON SUH MINI
TYPHOON HL
C-SD-TA
LFTA
SUTA
HSS-HSS/CO DRILLS
G2
MDTA
HF VH/UP
MEF
ALU
MEX
UH
HSS/CO-HSSP END MILLS
CARBIDE BURRS

● stock standard ○ non-standard stock ▽ stock exhaustion

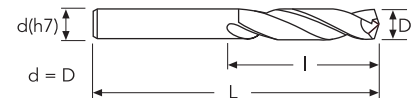
# 238LFTA

self-centering, general purpose, short



P	M	K	N	S	H
★	☆	★	☆		

★ 1st choice ☆ suitable



D(h8)	D Tol.	d(h7)	I	L	PACKAGING	EDP No.	Stock
9.80	0/-0.022	9.8	87	133	1	P238LFTA0980	●
9.90	0/-0.022	9.9	87	133	1	P238LFTA0990	●
10.00	0/-0.022	10	87	133	1	P238LFTA1000	●
10.20	0/-0.027	10.2	87	133	1	P238LFTA1020	●
10.30	0/-0.027	10.3	87	133	1	P238LFTA1030	●
10.50	0/-0.027	10.5	87	133	1	P238LFTA1050	●
10.80	0/-0.027	10.8	94	142	1	P238LFTA1080	●
11.00	0/-0.027	11	94	142	1	P238LFTA1100	●
11.20	0/-0.027	11.2	94	142	1	P238LFTA1120	●
11.30	0/-0.027	11.3	94	142	1	P238LFTA1130	●
11.50	0/-0.027	11.5	94	142	1	P238LFTA1150	●
11.80	0/-0.027	11.8	94	142	1	P238LFTA1180	●
12.00	0/-0.027	12	101	151	1	P238LFTA1200	●
12.20	0/-0.027	12.2	101	151	1	P238LFTA1220	●
12.50	0/-0.027	12.5	101	151	1	P238LFTA1250	●
12.80	0/-0.027	12.8	101	151	1	P238LFTA1280	●
13.00	0/-0.027	13	101	151	1	P238LFTA1300	●
13.30	0/-0.027	13.3	108	160	1	P238LFTA1330	●
13.50	0/-0.027	13.5	108	160	1	P238LFTA1350	●
13.80	0/-0.027	13.8	108	160	1	P238LFTA1380	●
14.00	0/-0.027	14	108	160	1	P238LFTA1400	●
14.50	0/-0.027	14.5	114	169	1	P238LFTA1450	●
14.80	0/-0.027	14.8	114	169	1	P238LFTA1480	●
15.00	0/-0.027	15	114	169	1	P238LFTA1500	●
15.30	0/-0.027	15.3	120	178	1	P238LFTA1530	●
15.50	0/-0.027	15.5	120	178	1	P238LFTA1550	●
15.80	0/-0.027	15.8	120	178	1	P238LFTA1580	●
16.00	0/-0.027	16	120	178	1	P238LFTA1600	●
16.50	0/-0.027	16.5	125	184	1	P238LFTA1650	●
17.00	0/-0.027	17	125	184	1	P238LFTA1700	●
17.50	0/-0.027	17.5	130	191	1	P238LFTA1750	●
18.00	0/-0.027	18	130	191	1	P238LFTA1800	●
18.50	0/-0.033	18.5	135	198	1	P238LFTA1850	●
19.00	0/-0.033	19	135	198	1	P238LFTA1900	●
19.50	0/-0.033	19.5	140	205	1	P238LFTA1950	●
20.00	0/-0.033	20	140	205	1	P238LFTA2000	●

● stock standard ○ non-standard stock ▽ stock exhaustion



## 238LFTA

Material Group ISO 513	P1 P2			P3 P4			M1 M2					
	500-700 N/mm <sup>2</sup>			600-1000 N/mm <sup>2</sup>			< 750 N/mm <sup>2</sup>					
Hardness/Rm	30-40			20-30			14-18					
Vc (m/min)	30-40			20-30			14-18					
D (mm)	n (rpm)	fn (mm/rev)	Vf (mm/min)	n (rpm)	fn (mm/rev)	Vf (mm/min)	n (rpm)	fn (mm/rev)	Vf (mm/min)			
2	5570	0.054	300	3980	0.046	180	2550	0.038	100			
3	3720	0.076	280	2650	0.064	170	1700	0.053	90			
4	2790	0.097	270	1990	0.083	160	1270	0.068	90			
5	2230	0.119	260	1590	0.101	160	1020	0.083	80			
6	1860	0.140	260	1330	0.119	160	850	0.098	80			
7	1590	0.162	260	1140	0.138	160	730	0.113	80			
8	1390	0.184	260	1000	0.156	160	640	0.129	80			
9	1240	0.205	250	880	0.174	150	570	0.144	80			
10	1110	0.227	250	800	0.193	150	510	0.159	80			
11	1010	0.248	250	720	0.211	150	460	0.161	70			
12	930	0.270	250	660	0.230	150	420	0.176	70			
13	860	0.292	250	610	0.248	150	390	0.184	70			
14	800	0.313	250	570	0.266	150	360	0.197	70			
15	740	0.335	250	530	0.285	150	340	0.201	70			
16	700	0.356	250	500	0.303	150	320	0.214	70			
17	660	0.378	250	470	0.321	150	300	0.227	70			
18	620	0.400	250	440	0.340	150	280	0.240	70			
19	590	0.421	250	420	0.358	150	270	0.253	70			
20	560	0.443	250	400	0.376	150	250	0.266	70			

Material Group ISO 513	K1 K2			N1 N2			N3 N4					
	150-350 HB											
Hardness/Rm	25-35			50-60			35-45					
Vc (m/min)	25-35			50-60			35-45					
D (mm)	n (rpm)	fn (mm/rev)	Vf (mm/min)	n (rpm)	fn (mm/rev)	Vf (mm/min)	n (rpm)	fn (mm/rev)	Vf (mm/min)			
2	4780	0.051	250	8760	0.059	520	6370	0.054	340			
3	3180	0.072	230	5840	0.083	490	4250	0.076	320			
4	2390	0.092	220	4380	0.107	470	3180	0.097	310			
5	1910	0.113	220	3500	0.131	460	2550	0.119	300			
6	1590	0.133	210	2920	0.154	450	2120	0.140	300			
7	1360	0.154	210	2500	0.178	450	1820	0.162	290			
8	1190	0.174	210	2190	0.202	440	1590	0.184	290			
9	1060	0.195	210	1950	0.226	440	1420	0.205	290			
10	960	0.215	210	1750	0.249	440	1270	0.227	290			
11	870	0.236	210	1590	0.273	430	1160	0.248	290			
12	800	0.257	210	1460	0.297	430	1060	0.270	290			
13	730	0.277	200	1350	0.321	430	980	0.292	290			
14	680	0.298	200	1250	0.345	430	910	0.313	290			
15	640	0.318	200	1170	0.368	430	850	0.335	280			
16	600	0.339	200	1090	0.392	430	800	0.356	290			
17	560	0.359	200	1030	0.416	430	750	0.378	280			
18	530	0.380	200	970	0.440	430	710	0.400	280			
19	500	0.400	200	920	0.463	430	670	0.421	280			
20	480	0.421	200	880	0.487	430	640	0.443	280			

- INFO
- TYPHOON TA-HTA-4HTA
- TYPHOON PU-HPU
- TYPHOON SUH
- TYPHOON ALH
- TYPHOON HRC
- TYPHOON SUH MINI
- TYPHOON HL
- C-SD-TA
- LFTA
- SUTA
- HSS-HSS/CO DRILLS
- G2
- MDTA
- HF VH/UP
- MEF
- ALU
- MEX
- UH
- HSS/CO-HSSP END MILLS
- CARBIDE BURRS