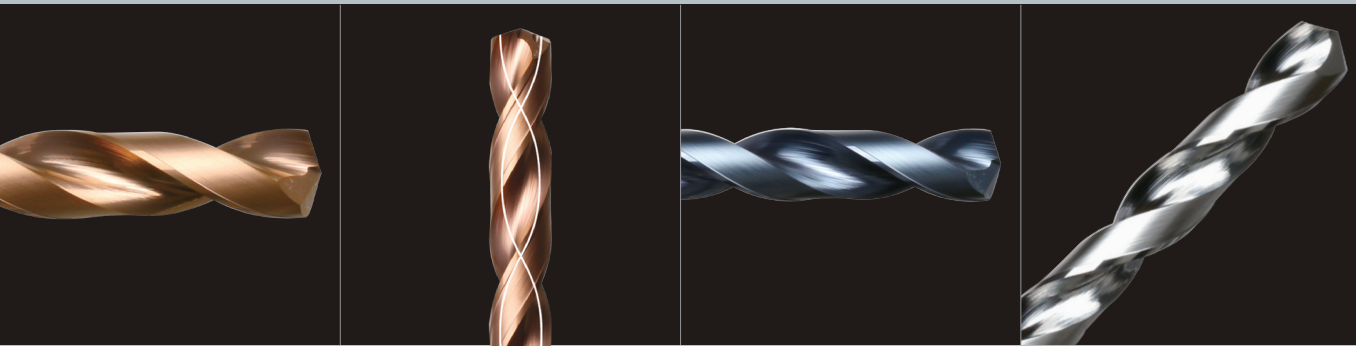


드릴 시리즈

DRILL SERIES





파워 맥스 드릴 시리즈 (Power Max Drill Series)

일반강, 주철, 스테인레스용 - 고속가공

301

파워 드릴 시리즈 (Power Drill Series)

일반강, 주철용

347

솔리드 스파이럴 드릴 시리즈 (Solid Spiral Drill Series)

다목적 및 일반 가공용







355

추천절삭조건표 (Technical Data)

358

드릴 시리즈

DRILLS SERIES

등급	특징	형상	외관	날수	아이템	적용	EDP No.	페이지
파워 맥스 드릴 Power Max Drill	* 고속가공 (일반강, 주철, 스테인레스 강)	6파셋		2날	3 X D		PF503	301
				2날	5 X D		PF505	305
				2날	3 X D / 내부급유형		SF503	309
				2날	5 X D / 내부급유형		SF505	313
		6파셋		2날	10 X D / 내부급유형		SF510	317
				2날	20 X D / 내부급유형		SF520	319
				2날	고정밀 3 X D		HP503	320
				2날	고정밀 3 X D 내부급유형		HPI 503	324
				2날	고정밀 5 X D 내부급유형		HPI 505	327
				2날	고정밀 8 X D 내부급유형		HPI 508	332
		릴리프		2날	STUB / DIN 6537K		P503A(F)	335
		6파셋		2날	DIN 6537K / 내부급유형		PI503A(F)	339
				2날	DIN 6537L / 내부급유형		PI505A(F)	343
		파워 드릴 Power Drill	* 일반가공 (일반강, 주철)	릴리프		2날	STUB TYPE - 3 X D	
6파셋				2날	MEDIUM TYPE - 5 X D		PDM	349
				2날	3 x D / 내부급유형		PDSI	351
				2날	5 x D / 내부급유형		PDMI	353
솔리드 스파이럴 드릴 Solid Spiral	* 일반가공	릴리프		2날	표준 길이		SSD	355
				2날	롱 타입		SSDL	357

	탄소강 (S45C,S55C...) ~HB225	합금강 (SCM,SK...) HB225~325	프리하든강 (NAK..) HRC30~50	열처리강		동	흑연	주철 FCD400, 500~	알루미늄	스테인레스 강
				~HRc55 SKD61	HRc55~ SKD11					
	○	◎	◎	◎	○			◎		◎
	◎	◎	○	○				○		
	○								◎	

스탠다드 드릴 시리즈

드릴
시리즈

DRILL SERIES



파워 맥스 드릴 _ Power Max Drill



제품번호	외관	특징	재고	페이지
PF503 ...series		3 X D	•	301
PF505 ...series		5 X D	•	305
SF503 ...series		3 X D / 내부급유형	•	309
SF505 ...series		5 X D / 내부급유형	•	313
SF510 ...series		10 X D / 내부급유형	•	317
SF520 ...series		20 X D / 내부급유형	•	319
HP503 ...series		고정밀 3 X D	•	320
HPI 503 ...series		고정밀 3 X D / 내부급유형	•	324
HPI 505 ...series		고정밀 5 X D / 내부급유형	•	327
HPI 508 ...series		고정밀 8 X D / 내부급유형	•	332
P503A(F) ...series		DIN 6537K		335
PI503A(F) ...series		DIN 6537K / 내부급유형		339
PI505A(F) ...series		DIN 6537L / 내부급유형		343

파워 드릴 _ Power Drill

WIDIN

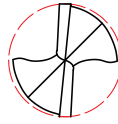
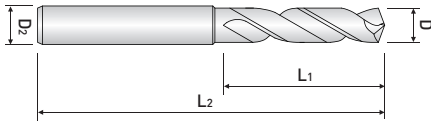
제품번호	외관	특징	재고	페이지
PDS ...series		3 x D	•	347
PDM ...series		5 x D	•	349
PDSI ...series		3 x D / 내부급유형	•	351
PDMI ...series		5 x D / 내부급유형	•	353

솔리드 스파이럴 드릴 시리즈 _ Solid Spiral

WIDIN

제품번호	외관	특징	재고	페이지
SSD ...series		표준 길이	•	355
SSDL ...series		롱 타입	•	357

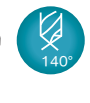
Power Max Drill



POWER MAX DRILL – STUB HIGH SPEED MACHINING, 3 X D

– 특수 소재 및 최신 코팅 적용으로 고속가공에 적합합니다.

PF503 ...series



EDP. No.	D			L1	L2	D2	STOCK		
	mm	fraction	inch						
PF503020	2.0	-	.0787	14	50	3	•		
PF503021	2.1	-	.0827				•		
PF503022	2.2	-	.0866				•		
PF503023	2.3	-	.0906				•		
PF503024	2.4	-	.0945				•		
PF503025	2.5	-	.0984				•		
PF503026	2.6	-	.1024				•		
PF503027	2.7	-	.1063				•		
PF503028	2.8	-	.1102				•		
PF503029	2.9	-	.1142				•		
PF503030	3.0	-	.1181	18	60	•			
PF503031	3.1	-	.1220	20	60	4	•		
PF50303175	3.175	1/8	.1250				•		
PF503032	3.2	-	.1260				•		
PF50303264	3.264	-	.1285				•		
PF503033	3.3	-	.1299				•		
PF503034	3.4	-	.1339				•		
PF503035	3.5	-	.1378				•		
PF50303572	3.572	9/64	.1406				22	60	•
PF503036	3.6	-	.1417				•		
PF503037	3.7	-	.1457				•		
PF503038	3.8	-	.1496	24	62	5	•		
PF503039	3.9	-	.1535				•		
PF503040	4.0	-	.1575				•		
PF50304039	4.039	-	.1590				•		
PF503041	4.1	-	.1614				•		
PF503042	4.2	-	.1654				•		
PF503043	4.3	-	.1693				•		
PF503044	4.4	-	.1732				•		
PF503045	4.5	-	.1772				•		
PF503046	4.6	-	.1811				•		
PF503047	4.7	-	.1850	26	62	5	•		
PF50304763	4.763	3/16	.1875	•					
PF503048	4.8	-	.1890	•					
PF503049	4.9	-	.1920	•					
PF503050	5.0	-	.1969	•					
PF503051	5.1	-	.2008	•					
PF50305159	5.159	13/64	.2031	28	66	6	•		
PF503052	5.2	-	.2047				•		
PF503053	5.3	-	.2087				•		
PF503054	5.4	-	.2126				•		
PF503055	5.5	-	.2165				•		

Data • p360

EDP. No.	D			L ₁	L ₂	D ₂	STOCK			
	mm	fraction	inch							
PF50305558	5.558	7/32	.2188	30	66	6	•			
PF503056	5.6	-	.2205				•			
PF503057	5.7	-	.2244				•			
PF503058	5.8	-	.2283				•			
PF503059	5.9	-	.2323				•			
PF50305953	5.953	15/64	.2344				•			
PF503060	6.0	-	.2362				•			
PF503061	6.1	-	.2402				•			
PF503062	6.2	-	.2441				34	74	7	•
PF503063	6.3	-	.2480							•
PF5030635	6.350	1/4	.2500	•						
PF503064	6.4	-	.2520	•						
PF503065	6.5	-	.2559	•						
PF503066	6.6	-	.2598	•						
PF503067	6.7	-	.2638	•						
PF50306747	6.747	17/64	.2656	•						
PF503068	6.8	-	.2677	37	74	7				•
PF503069	6.9	-	.2717							•
PF503070	7.0	-	.2756				•			
PF503071	7.1	-	.2795				•			
PF50307145	7.145	9/32	.2813				•			
PF503072	7.2	-	.2835				•			
PF503073	7.3	-	.2874				•			
PF503074	7.4	-	.2913				•			
PF503075	7.5	-	.2953				•			
PF50307541	7.541	19/64	.2969				40	79	8	•
PF503076	7.6	-	.2992	•						
PF503077	7.7	-	.3031	•						
PF503078	7.8	-	.3071	•						
PF503079	7.9	-	.3110	•						
PF50307938	7.938	5/16	.3125	•						
PF503080	8.0	-	.3150	•						
PF503081	8.1	-	.3189	•						
PF503082	8.2	-	.3228	43	84	9				•
PF503083	8.3	-	.3268							•
PF50308334	8.334	21/64	.3281				•			
PF503084	8.4	-	.3307				•			
PF503085	8.5	-	.3320				•			
PF503086	8.6	-	.3346				•			
PF503087	8.7	-	.3386				•			
PF50308733	8.733	-	.3425				•			
PF503088	8.8	-	.3438				•			
PF503089	8.9	-	.3465				•			
PF503090	9.0	-	.3504	•						
PF503091	9.1	-	.3543	•						
PF50309129	9.129	23/64	.3594	47	89	10	•			
PF503092	9.2	-	.3622				•			
PF503093	9.3	-	.3661				•			
PF50309347	9.347	-	.3680				•			
PF503094	9.4	-	.3701				•			
PF503095	9.5	-	.3740				•			

Data • p360

EDP. No.	D			L ₁	L ₂	D ₂	STOCK			
	mm	fraction	inch							
PF50309525	9.525	3/8	.3750	47	89	10	•			
PF503096	9.6	-	.3780				•			
PF503097	9.7	-	.3819				•			
PF503098	9.8	-	.3858				•			
PF503099	9.9	-	.3898				•			
PF50309921	9.921	25/64	.3906				•			
PF503100	10.0	-	.3937				•			
PF503101	10.1	-	.3976				•			
PF503102	10.2	-	.4016				51	95	11	•
PF503103	10.3	-	.4055							•
PF5031032	10.32	13/32	.4063	•						
PF503104	10.4	-	.4094	•						
PF503105	10.5	-	.4134	•						
PF503106	10.6	-	.4173	•						
PF503107	10.7	-	.4213	•						
PF50310716	10.716	27/64	.4219	•						
PF503108	10.8	-	.4252	•						
PF503109	10.9	-	.4291	•						
PF503110	11.0	-	.4331	•						
PF503111	11.1	-	.4370	•						
PF50311113	11.113	7/16	.4375	54	102	12	•			
PF503112	11.2	-	.4409				•			
PF503113	11.3	-	.4449				•			
PF503114	11.4	-	.4488				•			
PF503115	11.5	-	.4528				•			
PF503116	11.6	-	.4531				•			
PF503117	11.7	-	.4567				•			
PF503118	11.8	-	.4606				•			
PF503119	11.9	15/32	.4646				•			
PF50311908	11.908	-	.4685				•			
PF503120	12.0	-	.4688	•						
PF503121	12.1	-	.4724	•						
PF503122	12.2	-	.4803	57	102	13	•			
PF503123	12.3	-	.4843				•			
PF50312304	12.304	31/64	.4844				•			
PF503124	12.4	-	.4882				•			
PF503125	12.5	-	.4921				•			
PF503126	12.6	-	.4961				•			
PF503127	12.7	-	.5000				•			
PF503128	12.8	-	.5039				•			
PF503129	12.9	-	.5079				•			
PF503130	13.0	-	.5118				•			
PF50313096	13.096	33/64	.5156	60	107	14	•			
PF503131	13.1	-	.5157				•			
PF503132	13.2	-	.5197				•			
PF503133	13.3	-	.5236				•			
PF503134	13.4	-	.5276				•			
PF50313494	13.494	17/32	.5313				•			
PF503135	13.5	-	.5315				•			
PF503136	13.6	-	.5354				•			
PF503137	13.7	-	.5394				•			

Data • p360

EDP. No.	D			L ₁	L ₂	D ₂	STOCK
	mm	fraction	inch				
PF503138	13.8	-	.5433	60	107	14	•
PF50313891	13.891	35/64	.5469				•
PF503139	13.9	-	.5472				•
PF503140	14.0	-	.5512				•
PF503141	14.1	-	.5551				•
PF503142	14.2	-	.5591	62	111	15	•
PF50314288	14.288	9/16	.5625				•
PF503143	14.3	-	.5630				•
PF503144	14.4	-	.5669				•
PF503145	14.5	-	.5709				•
PF503146	14.6	-	.5748				•
PF503147	14.7	-	.5787				•
PF503148	14.8	-	.5827				•
PF503149	14.9	-	.5866				•
PF503150	15.0	-	.5906				•
PF50315081	15.081	19/32	.5937				•
PF503151	15.1	-	.5945	•			
PF503152	15.2	-	.5984	64	115	16	•
PF503153	15.3	-	.6063				•
PF503154	15.4	-	.6102				•
PF503155	15.5	-	.6142				•
PF503156	15.6	-	.6181				•
PF503157	15.7	-	.6220				•
PF503158	15.8	-	.6250				•
PF50315875	15.875	5/8	.6299				•
PF503160	16.0	-	.6339				•
PF503161	16.1	-	.6371				•
PF503163	16.3	-	.6417				66
PF503165	16.5	-	.6496	•			
PF50316667	16.667	21/32	.6562	•			
PF503170	17.0	-	.6693	•			
PF503171	17.1	-	.6732	•			
PF503172	17.2	-	.6772	66	123	18	•
PF50317463	17.463	11/16	.6772				•
PF503175	17.5	-	.6875				•
PF503177	17.7	-	.6890				•
PF503178	17.8	-	.6969				•
PF503180	18.0	-	.7008				•
PF503181	18.1	-	.7087				•
PF503182	18.2	-	.7165	70	127	19	•
PF503185	18.5	-	.7283				•
PF503190	19.0	-	.7480				•
PF503191	19.1	-	.7520				•
PF503195	19.5	-	.7677	70	131	20	•
PF503197	19.7	-	.7756				•
PF503200	20.0	-	.7874				•

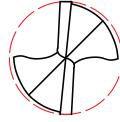
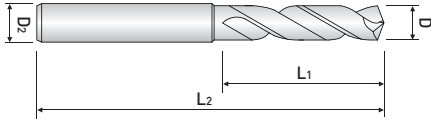
Data • p360

■ 허용공차

μm=1/1000mm

공차	외경	공차			
		1이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하
인선부(h8)	0	0	0	0	0
	-14	-18	-22	-27	-33
생크부(h6)	0	0	0	0	0
	-6	-8	-9	-11	-13

Power Max Drill



POWER MAX DRILL- MEDIUM HIGH SPEED MACHINING, 5 X D

- 특수 소재 및 최신 코팅 적용으로 고속가공에 적합합니다.

PF505 ...series



EDP. No.	D			L1	L2	D2	STOCK
	mm	fraction	inch				
PF505030	3.0	-	.1181	25		3	•
PF505031	3.1	-	.1220				•
PF50503175	3.175	1/8	.1250		60		•
PF505032	3.2	-	.1260	27			•
PF50503264	3.264	-	.1285				•
PF505033	3.3	-	.1299				•
PF505034	3.4	-	.1339				•
PF505035	3.5	-	.1378			4	•
PF50503572	3.572	9/64	.1406	30	65		•
PF505036	3.6	-	.1417				•
PF505037	3.7	-	.1457				•
PF505038	3.8	-	.1496				•
PF505039	3.9	-	.1535	33	71		•
PF50504039	4.039	-	.1575				•
PF505040	4.0	-	.1575				•
PF505041	4.1	-	.1590	33			•
PF505042	4.2	-	.1614				•
PF505043	4.3	-	.1654				•
PF505044	4.4	-	.1693				•
PF505045	4.5	-	.1732	36	71	5	•
PF505046	4.6	-	.1772				•
PF505047	4.7	-	.1811				•
PF50504763	4.763	3/16	.1850				•
PF505048	4.8	-	.1875	39			•
PF505049	4.9	-	.1890				•
PF505050	5.0	-	.1920				•
PF505051	5.1	-	.2008				•
PF50505159	5.159	13/64	.2031	39			•
PF505052	5.2	-	.2047				•
PF505053	5.3	-	.2087				•
PF505054	5.4	-	.2126				•
PF505055	5.5	-	.2165				•
PF50505558	5.558	7/32	.2188		83	6	•
PF505056	5.6	-	.2205				•
PF505057	5.7	-	.2244	43			•
PF505058	5.8	-	.2283				•
PF505059	5.9	-	.2323				•
PF50505953	5.953	15/64	.2344				•
PF505060	6.0	-	.2362				•
PF505061	6.1	-	.2402				•
PF505062	6.2	-	.2441	47	87	7	•
PF505063	6.3	-	.2480				•

Data • p360

EDP. No.	D			L ₁	L ₂	D ₂	STOCK
	mm	fraction	inch				
PF5050635	6.350	1/4	.2500	47	87	7	•
PF505064	6.4	-	.2520				•
PF505065	6.5	-	.2559				•
PF505066	6.6	-	.2598				•
PF505067	6.7	-	.2638				•
PF50506747	6.747	17/64	.2656				•
PF505068	6.8	-	.2677				•
PF505069	6.9	-	.2717				•
PF505070	7.0	-	.2756				•
PF505071	7.1	-	.2795				•
PF50507145	7.145	9/32	.2813	52	92	8	•
PF505072	7.2	-	.2835				•
PF505073	7.3	-	.2874				•
PF505074	7.4	-	.2913				•
PF505075	7.5	-	.2953				•
PF50507541	7.541	19/64	.2969				•
PF505076	7.6	-	.2992				•
PF505077	7.7	-	.3031				•
PF505078	7.8	-	.3071				•
PF505079	7.9	-	.3110				•
PF50507938	7.938	5/16	.3125	56	96	9	•
PF505080	8.0	-	.3150				•
PF505081	8.1	-	.3189				•
PF505082	8.2	-	.3228				•
PF505083	8.3	-	.3268				•
PF50508334	8.334	21/64	.3281				•
PF505084	8.4	-	.3307				•
PF505085	8.5	-	.3346				•
PF505086	8.6	-	.3386				•
PF505087	8.7	-	.3425				•
PF50508733	8.733	11/32	.3438	62	105	10	•
PF505088	8.8	-	.3465				•
PF505089	8.9	-	.3504				•
PF505090	9.0	-	.3543				•
PF505091	9.1	-	.3583				•
PF50509129	9.129	23/64	.3594				•
PF505092	9.2	-	.3622				•
PF505093	9.3	-	.3661				•
PF505094	9.4	-	.3701				•
PF505095	9.5	-	.3740				•
PF50509525	9.525	3/8	.3750	62	105	10	•
PF505096	9.6	-	.3780				•
PF505097	9.7	-	.3819				•
PF505098	9.8	-	.3858				•
PF505099	9.9	-	.3898				•
PF50509921	9.921	25/64	.3906				•
PF505100	10.0	-	.3937				•

Data • p360

EDP. No.	D			L ₁	L ₂	D ₂	STOCK
	mm	fraction	inch				
PF505101	10.1	-	.3976	68	115	11	•
PF505102	10.2	-	.4016				•
PF505103	10.3	-	.4055				•
PF50501032	10.32	13/32	.4063				•
PF505104	10.4	-	.4094				•
PF505105	10.5	-	.4134				•
PF505106	10.6	-	.4173				•
PF505107	10.7	-	.4213				•
PF50510716	10.716	27/64	.4219				•
PF505108	10.8	-	.4252				•
PF505109	10.9	-	.4291				•
PF505110	11.0	-	.4331	•			
PF505111	11.1	-	.4370	71	121	12	•
PF50511113	11.113	7/16	.4375				•
PF505112	11.2	-	.4409				•
PF505113	11.3	-	.4449				•
PF505114	11.4	-	.4488				•
PF505115	11.5	-	.4528				•
PF505116	11.6	-	.4567				•
PF505117	11.7	-	.4606				•
PF505118	11.8	-	.4646				•
PF505119	11.9	-	.4685				•
PF50511908	11.908	15/32	.4688				•
PF505120	12.0	-	.4724	75	125	13	•
PF505121	12.1	-	.4764				•
PF505122	12.2	-	.4803				•
PF505123	12.3	-	.4843				•
PF50512304	12.304	31/64	.4844				•
PF505124	12.4	-	.4882				•
PF505125	12.5	-	.4921				•
PF505126	12.6	-	.4961				•
PF505127	12.7	-	.5000				•
PF505128	12.8	-	.5039				•
PF505129	12.9	-	.5079				•
PF505130	13.0	-	.5118	80	134	14	•
PF50513096	13.096	33/64	.5156				•
PF505131	13.1	-	.5157				•
PF505132	13.2	-	.5197				•
PF505133	13.3	-	.5236				•
PF505134	13.4	-	.5276				•
PF50513494	13.494	17/32	.5313				•
PF505135	13.5	-	.5315				•

Data • p360

EDP. No.	D			L ₁	L ₂	D ₂	STOCK				
	mm	fraction	inch								
PF505136	13.6	-	.5354	80	134	14	●				
PF505137	13.7	-	.5394								
PF505138	13.8	-	.5433								
PF50513891	13.891	35/64	.5469								
PF505139	13.9	-	.5472								
PF505140	14.0	-	.5512								
PF505141	14.1	-	.5551								
PF505142	14.2	-	.5591	83	143	15	●				
PF50514288	14.288	-	.5625								
PF505143	14.3	-	.5630								
PF505144	14.4	-	.5669								
PF505145	14.5	-	.5709								
PF505146	14.6	-	.5748								
PF505147	14.7	-	.5787								
PF505148	14.8	-	.5827								
PF505149	14.9	-	.5866								
PF505150	15.0	-	.5906								
PF50515081	15.081	19/32	.5937					90	152	16	●
PF505151	15.1	-	.5945								
PF505152	15.2	-	.5984								
PF505154	15.4	-	.6063								
PF505155	15.5	-	.6102								
PF505156	15.6	-	.6142								
PF505157	15.7	-	.6181								
PF505158	15.8	-	.6220								
PF50515875	15.875	5/8	.6250								
PF505160	16.0	-	.6299								
PF505161	16.1	-	.6339	95	155	17	●				
PF505163	16.3	-	.6417								
PF505165	16.5	-	.6496								
PF50516667	16.667	21/32	.6562								
PF505170	17.0	-	.6693								
PF505171	17.1	-	.6732	100	157	18	●				
PF505172	17.2	-	.6772								
PF50517463	17.463	11/16	.6875								
PF505175	17.5	-	.6890								
PF505177	17.7	-	.6969								
PF505178	17.8	-	.7008								
PF505180	18.0	-	.7087								
PF505181	18.1	-	.7126					105	160	19	●
PF505182	18.2	-	.7165								
PF505185	18.5	-	.7283								
PF505190	19.0	-	.7480								
PF505191	19.1	-	.7520	110	163	20	●				
PF505195	19.5	-	.7677								
PF505197	19.7	-	.7756								
PF505200	20.0	-	.7874								

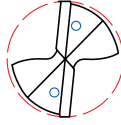
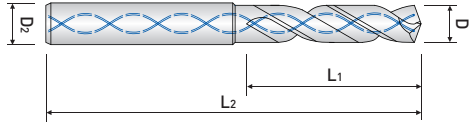
Data • p360

■ 허용공차

μm=1/1000mm

공차	외경	공차				
		1이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하	18초과 300이하
인선부(h8)		0 -14	0 -18	0 -22	0 -27	0 -33
생크부(h6)		0 -6	0 -8	0 -9	0 -11	0 -13

Power Max Drill



3 X D / 내부급유형
POWER MAX DRILL - STUB /
INTERNAL COOLANT

- 특수 소재 및 최신 코팅 적용으로 고속가공에
적합합니다.

SF503 ...series



EDP. No.	D			L1	L2	D2	STOCK
	mm	fraction	inch				
SF503030	3.0	-	.1181	18	60	3	•
SF503031	3.1	-	.1220	20		4	•
SF50303175	3.175	1/8	.1250				•
SF503032	3.2	-	.1260				•
SF50303246	3.264	-	.1285				•
SF503033	3.3	-	.1299				•
SF503034	3.4	-	.1339	22	5		•
SF503035	3.5	-	.1378			•	
SF50303572	3.572	9/64	.1406			•	
SF503036	3.6	-	.1417			•	
SF503037	3.7	-	.1457	24		62	•
SF503038	3.8	-	.1496				•
SF503039	3.9	-	.1535		•		
SF503040	4.0	-	.1575	26	66		•
SF50304039	4.039	-	.1590				•
SF503041	4.1	-	.1614				•
SF503042	4.2	-	.1654			•	
SF503043	4.3	-	.1693			•	
SF503044	4.4	-	.1732			•	
SF503045	4.5	-	.1772		•		
SF503046	4.6	-	.1811		•		
SF503047	4.7	-	.1850		•		
SF50304763	4.763	3/16	.1875		•		
SF503048	4.8	-	.1890		•		
SF503049	4.9	-	.1920	•			
SF503050	5.0	-	.1969	28	74	•	
SF503051	5.1	-	.2008			•	
SF50305159	5.159	13/64	.2031			•	
SF503052	5.2	-	.2047			•	
SF503053	5.3	-	.2087			•	
SF503054	5.4	-	.2126			•	
SF503055	5.5	-	.2165		30	7	•
SF50305558	5.558	7/32	.2188				•
SF503056	5.6	-	.2205				•
SF503057	5.7	-	.2244				•
SF503058	5.8	-	.2283	•			
SF503059	5.9	-	.2323	34	•		
SF50305953	5.953	15/64	.2344		•		
SF503060	6.0	-	.2362		•		
SF503061	6.1	-	.2402	•			
SF503062	6.2	-	.2441	•			
SF503063	6.3	-	.2480	•			

Data • p360

EDP. No.	D			L ₁	L ₂	D ₂	STOCK			
	mm	fraction	inch							
SF5030635	6.350	1/4	.2500	34	74	7	•			
SF503064	6.4	-	.2520				•			
SF503065	6.5	-	.2559				•			
SF503066	6.6	-	.2598				•			
SF503067	6.7	-	.2638				•			
SF50306747	6.747	17/64	.2656	37		79	8	•		
SF503068	6.8	-	.2677					•		
SF503069	6.9	-	.2717					•		
SF503070	7.0	-	.2756					•		
SF503071	7.1	-	.2795					•		
SF50307145	7.145	9/32	.2813	40	84		9	•		
SF503072	7.2	-	.2835					•		
SF503073	7.3	-	.2874					•		
SF503074	7.4	-	.2913					•		
SF503075	7.5	-	.2953					•		
SF50307541	7.541	19/64	.2969			•				
SF503076	7.6	-	.2992			•				
SF503077	7.7	-	.3031			•				
SF503078	7.8	-	.3071			•				
SF503079	7.9	-	.3110			•				
SF50307938	7.938	5/16	.3125			•				
SF503080	8.0	-	.3150			•				
SF503081	8.1	-	.3189			43		89	10	•
SF503082	8.2	-	.3228							•
SF503083	8.3	-	.3268							•
SF50308334	8.334	21/64	.3281	•						
SF503084	8.4	-	.3307	•						
SF503085	8.5	-	.3346	•						
SF503086	8.6	-	.3386	•						
SF503087	8.7	-	.3425	•						
SF50308733	8.733	11/32	.3438	•						
SF503088	8.8	-	.3465	•						
SF503089	8.9	-	.3504	•						
SF503090	9.0	-	.3543	•						
SF503091	9.1	-	.3583	47	89		10			•
SF50309129	9.129	23/64	.3594							•
SF503092	9.2	-	.3622							•
SF503093	9.3	-	.3661			•				
SF503094	9.4	-	.3701			•				
SF503095	9.5	-	.3740			•				
SF50309525	9.525	3/8	.3750			•				
SF503096	9.6	-	.3780	•						

Data • p360

EDP. No.	D			L ₁	L ₂	D ₂	STOCK			
	mm	fraction	inch							
SF503097	9.7	-	.3819	47	89	10	•			
SF503098	9.8	-	.3858				•			
SF503099	9.9	-	.3898				•			
SF50309921	9.921	25/64	.3906				•			
SF503100	10.0	-	.3937				•			
SF503101	10.1	-	.3976	51	95	11	•			
SF503102	10.2	-	.4016				•			
SF503103	10.3	-	.4055				•			
SF5031032	10.32	13/32	.4063				•			
SF503104	10.4	-	.4094				•			
SF503105	10.5	-	.4134				•			
SF503106	10.6	-	.4173				•			
SF503107	10.7	-	.4213				•			
SF50310716	10.716	27/64	.4219				•			
SF503108	10.8	-	.4252				•			
SF503109	10.9	-	.4291				•			
SF503110	11.0	-	.4331				•			
SF503111	11.1	-	.4370				54	102	12	•
SF50311113	11.113	7/16	.4375							•
SF503112	11.2	-	.4409							•
SF503113	11.3	-	.4449	•						
SF503114	11.4	-	.4488	•						
SF503115	11.5	-	.4528	•						
SF50311509	11.509	29/64	.4531	•						
SF503116	11.6	-	.4567	•						
SF503117	11.7	-	.4606	•						
SF503118	11.8	-	.4646	•						
SF503119	11.9	-	.4685	•						
SF50311908	11.908	15/32	.4688	•						
SF503120	12.0	-	.4724	57	102	13				•
SF503121	12.1	-	.4764							•
SF503122	12.2	-	.4803							•
SF503123	12.3	-	.4843				•			
SF50312304	12.304	31/64	.4844				•			
SF503124	12.4	-	.4882				•			
SF503125	12.5	-	.4921				•			
SF503126	12.6	-	.4961				•			
SF503127	12.7	1/2	.5000				•			
SF503128	12.8	-	.5039				•			
SF503129	12.9	-	.5079				•			
SF503130	13.0	-	.5118				•			
SF50313096	13.096	33/64	.5156				60	107	14	•
SF503131	13.1	-	.5157							•
SF503132	13.2	-	.5197							•
SF503133	13.3	-	.5236	•						
SF503134	13.4	-	.5276	•						
SF50313494	13.494	17/32	.5313	•						
SF503135	13.5	-	.5315	•						

Data • p360

EDP. No.	D			L ₁	L ₂	D ₂	STOCK				
	mm	fraction	inch								
SF503136	13.6	-	.5354	60	107	14	●				
SF503137	13.7	-	.5394								
SF503138	13.8	-	.5433								
SF50313891	13.891	35/64	.5469								
SF503139	13.9	-	.5472								
SF503140	14.0	-	.5512								
SF503141	14.1	-	.5551								
SF503142	14.2	-	.5591	62	111	15	●				
SF50314288	14.288	9/16	.5625								
SF503143	14.3	-	.5630								
SF503144	14.4	-	.5669								
SF503145	14.5	-	.5709								
SF503146	14.6	-	.5748								
SF503147	14.7	-	.5787								
SF503148	14.8	-	.5827								
SF503149	14.9	-	.5866								
SF503150	15.0	-	.5906								
SF50315081	15.081	19/32	.5937					64	115	16	●
SF503151	15.1	-	.5945								
SF503152	15.2	-	.5984								
SF503154	15.4	-	.6063								
SF503155	15.5	-	.6102								
SF503156	15.6	-	.6142								
SF503157	15.7	-	.6181								
SF503158	15.8	-	.6220								
SF50315875	15.875	5/8	.6250								
SF503160	16.0	-	.6299								
SF503161	16.1	-	.6339	66	119	17	●				
SF503163	16.3	-	.6417								
SF503165	16.5	-	.6496								
SF50316667	16.667	21/32	.6562								
SF503170	17.0	-	.6693								
SF503171	17.1	-	.6732	66	123	18	●				
SF503172	17.2	-	.6772								
SF50317463	17.463	11/16	.6875								
SF503175	17.5	-	.6890								
SF503177	17.7	-	.6969								
SF503178	17.8	-	.7008								
SF503180	18.0	-	.7087								
SF503181	18.1	-	.7126	70	127	19	●				
SF503182	18.2	-	.7165								
SF503185	18.5	-	.7283								
SF503190	19.0	-	.7480								
SF503191	19.1	-	.7520								
SF503195	19.5	-	.7677	70	131	20	●				
SF503197	19.7	-	.7756								
SF503200	20.0	-	.7874								

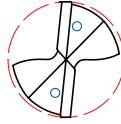
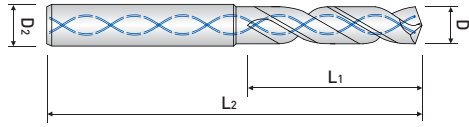
Data • p360

■ 허용공차

μm=1/1000mm

공차	외경	μm=1/1000mm			
		1이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하
인선부(h8)	0 -14	0 -18	0 -22	0 -27	0 -33
생크부(h6)	0 -6	0 -8	0 -9	0 -11	0 -13

Power Max Drill



5 X D / 내부급유형
POWER MAX DRILL - MEDIUM /
INTERNAL COOLANT

- 특수 소재 및 최신 코팅 적용으로 고속가공에
적합합니다.

SF505 ...series



EDP. No.	D			L ₁	L ₂	D ₂	STOCK
	mm	fraction	inch				
SF505031	3.1	-	.1220	27	74	4	•
SF50503175	3.175	1/8	.1250				•
SF505032	3.2	-	.1260				•
SF50503264	3.264	-	.1285				•
SF505033	3.3	-	.1299				•
SF505034	3.4	-	.1339				•
SF505035	3.5	-	.1378	30	74	4	•
SF50503572	3.572	9/64	.1406				•
SF505036	3.6	-	.1417				•
SF505037	3.7	-	.1457				•
SF505038	3.8	-	.1496				•
SF505039	3.9	-	.1535				•
SF505040	4.0	-	.1575	33	74	4	•
SF50504039	4.039	-	.1590				•
SF505041	4.1	-	.1614				•
SF505042	4.2	-	.1654				•
SF505043	4.3	-	.1693				•
SF505044	4.4	-	.1732				36
SF505045	4.5	-	.1772	•			
SF505046	4.6	-	.1811	•			
SF505047	4.7	-	.1850	•			
SF50504763	4.763	3/16	.1875	•			
SF505048	4.8	-	.1890	39	80	5	
SF505049	4.9	-	.1920				•
SF505050	5.0	-	.1969				•
SF505051	5.1	-	.2008				•
SF50505159	5.159	13/64	.2031				•
SF505052	5.2	-	.2047				43
SF505053	5.3	-	.2087	•			
SF505054	5.4	-	.2126	•			
SF505055	5.5	-	.2165	•			
SF50505558	5.558	7/32	.2188	•			
SF505056	5.6	-	.2205	47	95	7	
SF505057	5.7	-	.2244				•
SF505058	5.8	-	.2283				•
SF505059	5.9	-	.2323				•
SF50505953	5.953	15/64	.2344				•
SF505060	6.0	-	.2362				47
SF505061	6.1	-	.2402	•			
SF505062	6.2	-	.2441	•			
SF505063	6.3	-	.2480	•			
SF5050635	6.350	1/4	.2500	•			

Data • p360

EDP. No.	D			L ₁	L ₂	D ₂	STOCK
	mm	fraction	inch				
SF505064	6.4	-	.2520	47	95	7	•
SF505065	6.5	-	.2559				•
SF505066	6.6	-	.2598				•
SF505067	6.7	-	.2638				•
SF50506747	6.747	17/64	.2656				•
SF505068	6.8	-	.2677				•
SF505069	6.9	-	.2717				•
SF505070	7.0	-	.2756				•
SF505071	7.1	-	.2795				•
SF50507145	7.145	9/32	.2813				•
SF505072	7.2	-	.2835	•			
SF505073	7.3	-	.2874	•			
SF505074	7.4	-	.2913	•			
SF505075	7.5	-	.2953	•			
SF50507541	7.541	19/64	.2969	52	103	8	•
SF505076	7.6	-	.2992				•
SF505077	7.7	-	.3031				•
SF505078	7.8	-	.3071				•
SF505079	7.9	-	.3110				•
SF50507938	7.938	5/16	.3125				•
SF505080	8.0	-	.3150				•
SF505081	8.1	-	.3189				•
SF505082	8.2	-	.3228				•
SF505083	8.3	-	.3268				•
SF50508334	8.334	21/64	.3281	56	105	9	•
SF505084	8.4	-	.3307				•
SF505085	8.5	-	.3346				•
SF505086	8.6	-	.3386				•
SF505087	8.7	-	.3425				•
SF50508733	8.733	11/32	.3438				•
SF505088	8.8	-	.3465				•
SF505089	8.9	-	.3504				•
SF505090	9.0	-	.3543				•
SF505091	9.1	-	.3583				•
SF50509129	9.129	23/64	.3594	62	108	10	•
SF505092	9.2	-	.3622				•
SF505093	9.3	-	.3661				•
SF505094	9.4	-	.3701				•
SF505095	9.5	-	.3740				•
SF50509525	9.525	3/8	.3750				•
SF505096	9.6	-	.3780				•
SF505097	9.7	-	.3819				•

Data • p360

EDP. No.	D			L ₁	L ₂	D ₂	STOCK
	mm	fraction	inch				
SF505098	9.8	-	.3858	62	108	10	•
SF505099	9.9	-	.3898				•
SF50509921	9.921	25/64	.3906				•
SF505100	10.0	-	.3937				•
SF505101	10.1	-	.3976	68	125	11	•
SF505102	10.2	-	.4016				•
SF505103	10.3	-	.4055				•
SF5051032	10.32	13/32	.4063				•
SF505104	10.4	-	.4094				•
SF505105	10.5	-	.4134				•
SF505106	10.6	-	.4173				•
SF505107	10.7	-	.4213				•
SF50510716	10.716	27/64	.4219				•
SF505108	10.8	-	.4252				•
SF505109	10.9	-	.4291				•
SF505110	11.0	-	.4331				•
SF505111	11.1	-	.4370				71
SF50511113	11.113	7/16	.4375	•			
SF505112	11.2	-	.4409	•			
SF505113	11.3	-	.4449	•			
SF505114	11.4	-	.4488	•			
SF505115	11.5	-	.4528	•			
SF505116	11.6	-	.4567	•			
SF505117	11.7	-	.4606	•			
SF505118	11.8	-	.4646	•			
SF505119	11.9	-	.4685	•			
SF50511908	11.908	15/32	.4688	•			
SF505120	12.0	-	.4724	•			
SF505121	12.1	-	.4764	75	137	13	•
SF505122	12.2	-	.4803				•
SF505123	12.3	-	.4843				•
SF50512304	12.304	31/64	.4844				•
SF505124	12.4	-	.4882				•
SF505125	12.5	-	.4921				•
SF505126	12.6	-	.4961				•
SF505127	12.7	-	.5000				•
SF505128	12.8	-	.5039				•
SF505129	12.9	-	.5079				•
SF505130	13.0	-	.5118				•
SF50513096	13.096	33/64	.5156	80	142	14	•
SF505131	13.1	-	.5157				•
SF505132	13.2	-	.5197				•
SF505133	13.3	-	.5236				•
SF505134	13.4	-	.5276				•
SF50513494	13.494	-	.5313				•
SF505135	13.5	17/32	.5315				•
SF505136	13.6	-	.5354				•

Data • p360

EDP. No.	D			L ₁	L ₂	D ₂	STOCK				
	mm	fraction	inch								
SF505137	13.7	-	.5394	80	142	14	●				
SF505138	13.8	-	.5433								
SF50513891	13.891	35/64	.5469								
SF505139	13.9	-	.5472								
SF505140	14.0	-	.5512								
SF505141	14.1	-	.5551	83	148	15	●				
SF505142	14.2	-	.5591								
SF50514288	14.288	9/16	.5625								
SF505143	14.3	-	.5630								
SF505144	14.4	-	.5669								
SF505145	14.5	-	.5709								
SF505146	14.6	-	.5748								
SF505147	14.7	-	.5787								
SF505148	14.8	-	.5827								
SF505149	14.9	-	.5866								
SF505150	15.0	-	.5906								
SF50515081	15.081	19/32	.5937					90	152	16	●
SF505151	15.1	-	.5945								
SF505152	15.2	-	.5984								
SF505154	15.4	-	.6063								
SF505155	15.5	-	.6102								
SF505156	15.6	-	.6142								
SF505157	15.7	-	.6181								
SF505158	15.8	-	.6220								
SF50515875	15.875	5/8	.6250								
SF505160	16.0	-	.6299								
SF505161	16.1	-	.6339	95	155	17	●				
SF505163	16.3	-	.6417								
SF505165	16.5	-	.6496								
SF50516667	16.667	21/32	.6562								
SF505170	17.0	-	.6693								
SF505171	17.1	-	.6732	100	157	18	●				
SF505172	17.2	-	.6772								
SF50517463	17.463	11/16	.6875								
SF505175	17.5	-	.6890								
SF505177	17.7	-	.6969								
SF505178	17.8	-	.7008								
SF505180	18.0	-	.7087								
SF505181	18.1	-	.7126	105	160	19	●				
SF505182	18.2	-	.7165								
SF505185	18.5	-	.7283								
SF505190	19.0	-	.7480								
SF505191	19.1	-	.7520	110	163	20	●				
SF505195	19.5	-	.7677								
SF505197	19.7	-	.7756								
SF505200	20.0	-	.7874								

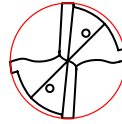
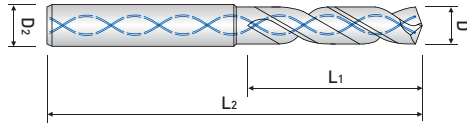
Data • p360

■ 허용공차

μm=1/1000mm

공차	외경	μm=1/1000mm			
		1이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하
인선부(h8)	0	0	0	0	0
	-14	-18	-22	-27	-33
생크부(h6)	0	0	0	0	0
	-6	-8	-9	-11	-13

Power Max Drill



10 X D / 내부급유형
POWER MAX DRILL - LONG
INTERNAL COOLANT

SF510 ...series



EDP. No.	D	L ₁	L ₂	D ₂	STOCK
SF510 030	3.0	39	87	3	•
SF510 031	3.1	46	94	4	•
SF510 032	3.2				•
SF510 033	3.3				•
SF510 034	3.4				•
SF510 035	3.5	52	101		•
SF510 036	3.6				•
SF510 037	3.7				•
SF510 038	3.8				•
SF510 039	3.9				•
SF510 040	4.0				•
SF510 041	4.1	59	108	5	•
SF510 042	4.2				•
SF510 043	4.3				•
SF510 044	4.4				•
SF510 045	4.5	66	117		•
SF510 046	4.6				•
SF510 047	4.7				•
SF510 048	4.8				•
SF510 049	4.9				•
SF510 050	5.0				•
SF510 051	5.1	72	123	6	•
SF510 052	5.2				•
SF510 053	5.3				•
SF510 054	5.4				•
SF510 055	5.5	79	130		•
SF510 056	5.6				•
SF510 057	5.7				•
SF510 058	5.8				•
SF510 059	5.9				•
SF510 060	6.0				•
SF510 061	6.1	85	138	7	•
SF510 062	6.2				•
SF510 063	6.3				•
SF510 064	6.4				•
SF510 065	6.5				•
SF510 066	6.6				•

EDP. No.	D	L ₁	L ₂	D ₂	STOCK	
SF510 067	6.7	92	145	7	•	
SF510 068	6.8				•	
SF510 069	6.9				•	
SF510 070	7.0				•	
SF510 071	7.1	98	153		8	•
SF510 072	7.2					•
SF510 073	7.3					•
SF510 074	7.4					•
SF510 075	7.5					•
SF510 076	7.6					•
SF510 077	7.7	105	160	•		
SF510 078	7.8			•		
SF510 079	7.9			•		
SF510 080	8.0			•		
SF510 081	8.1	111	166	9	•	
SF510 082	8.2				•	
SF510 083	8.3				•	
SF510 084	8.4				•	
SF510 085	8.5				•	
SF510 086	8.6				•	
SF510 087	8.7	118	173		•	
SF510 088	8.8				•	
SF510 089	8.9				•	
SF510 090	9.0				•	
SF510 091	9.1	124	179	10	•	
SF510 092	9.2				•	
SF510 093	9.3				•	
SF510 094	9.4				•	
SF510 095	9.5				•	
SF510 096	9.6				•	
SF510 097	9.7	131	186		•	
SF510 098	9.8				•	
SF510 099	9.9				•	
SF510 100	10.0				•	
SF510 101	10.1	138	193	11	•	
SF510 102	10.2				•	
SF510 103	10.3				•	

Data • p361

EDP. No.	D	L ₁	L ₂	D ₂	STOCK
SF510 104	10.4	138	193	11	•
SF510 105	10.5				•
SF510 106	10.6	•			
SF510 107	10.7	•			
SF510 108	10.8	144	205		•
SF510 109	10.9				•
SF510 110	11.0	•			
SF510 111	11.1	151	212	12	•
SF510 112	11.2				•
SF510 113	11.3				•
SF510 114	11.4				•
SF510 115	11.5				•

EDP. No.	D	L ₁	L ₂	D ₂	STOCK
SF510 116	11.6	157	218	12	•
SF510 117	11.7				•
SF510 118	11.8				•
SF510 119	11.9				•
SF510 120	12.0				•
SF510 121	12.1	164	225	13	•
SF510 122	12.2				•
SF510 123	12.3				•
SF510 124	12.4				•
SF510 125	12.5	170	236		•
SF510 126	12.6				•
SF510 127	12.7				•
SF510 128	12.8				•
SF510 129	12.9				•
SF510 130	13.0				•

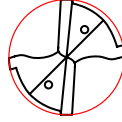
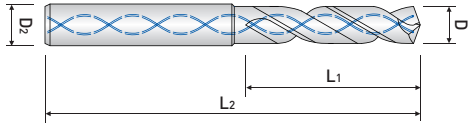
Data • p361

■ 허용공차

$\mu\text{m} = 1/1000\text{mm}$

공차 \ 외경	1이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하	18초과 300이하
인선부(h8)	0 -14	0 -18	0 -22	0 -27	0 -33
생크부(h6)	0 -6	0 -8	0 -9	0 -11	0 -13

Power Max Drill



20 X D / 내부급유형
POWER MAX DRILL
- EXTRA LONG / INTERNAL COOLANT

SF520 ...series



EDP. No.	D	L1	L2	D2	STOCK
SF520 041	4.1	104	155	5	•
SF520 042	4.2				•
SF520 043	4.3				•
SF520 044	4.4				•
SF520 045	4.5				•
SF520 046	4.6	116	167	5	•
SF520 047	4.7				•
SF520 048	4.8				•
SF520 049	4.9				•
SF520 050	5.0				•
SF520 051	5.1	127	178	6	•
SF520 052	5.2				•
SF520 053	5.3				•
SF520 054	5.4				•
SF520 055	5.5				•
SF520 056	5.6	139	190	6	•
SF520 057	5.7				•
SF520 058	5.8				•
SF520 059	5.9				•
SF520 060	6.0				•
SF520 061	6.1	150	203	7	•
SF520 062	6.2				•
SF520 063	6.3				•
SF520 064	6.4				•
SF520 065	6.5				•
SF520 066	6.6	162	215	7	•
SF520 067	6.7				•
SF520 068	6.8				•
SF520 069	6.9				•
SF520 070	7.0				•

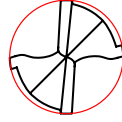
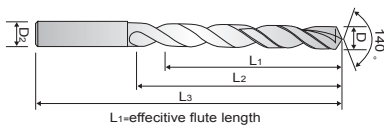
EDP. No.	D	L1	L2	D2	STOCK
SF520 071	7.1	173	228	8	•
SF520 072	7.2				•
SF520 073	7.3				•
SF520 074	7.4				•
SF520 075	7.5				•
SF520 076	7.6	185	240	8	•
SF520 077	7.7				•
SF520 078	7.8				•
SF520 079	7.9				•
SF520 080	8.0				•
SF520 081	8.1	196	251	9	•
SF520 082	8.2				•
SF520 083	8.3				•
SF520 084	8.4				•
SF520 085	8.5				•
SF520 086	8.6	208	263	9	•
SF520 087	8.7				•
SF520 088	8.8				•
SF520 089	8.9				•
SF520 090	9.0				•
SF520 091	9.1	219	274	10	•
SF520 092	9.2				•
SF520 093	9.3				•
SF520 094	9.4				•
SF520 095	9.5				•
SF520 096	9.6	231	286	10	•
SF520 097	9.7				•
SF520 098	9.8				•
SF520 099	9.9				•
SF520 100	10.0				•

Data • p361

■ 허용공차 mm = 1/1000mm

공차	외경	10이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하	18초과 300이하
인선부(h8)		0 -14	0 -18	0 -22	0 -27	0 -33
생크부(h6)		0 -6	0 -8	0 -9	0 -11	0 -13

Power Max Drill



고정밀 3 X D

POWER MAX DRILL-HIGH PRECISION

- 고정밀 구멍공차를 실현하였습니다.
- 관통구멍 및 단속구간에서 발생하는 떨림 및 채터링을 최소화하여 공구수명을 증대하였습니다.

HP503 ...series



EDP. No.	D		D ₂	L ₁	L ₂	L ₃	STOCK
	mm	inch					
HP503030	3.0	.1181	6	14	20	62	•
HP503031	3.1	.1220					•
HP503032	3.2	.1260					•
HP503033	3.3	.1299					•
HP503034	3.4	.1339					•
HP503035	3.5	.1378					•
HP503036	3.6	.1417					•
HP503037	3.7	.1457					•
HP503038	3.8	.1496	6	17	24	66	•
HP503039	3.9	.1535					•
HP503040	4.0	.1575					•
HP503041	4.1	.1614					•
HP503042	4.2	.1654					•
HP503043	4.3	.1693					•
HP503044	4.4	.1732					•
HP503045	4.5	.1772					•
HP503046	4.6	.1811					•
HP503047	4.7	.1850					•
HP503048	4.8	.1890	6	20	28	66	•
HP503049	4.9	.1929					•
HP503050	5.0	.1969					•
HP503051	5.1	.2008					•
HP503052	5.2	.2047					•
HP503053	5.3	.2087					•
HP503054	5.4	.2126					•
HP503055	5.5	.2165					•
HP503056	5.6	.2205					•
HP503057	5.7	.2244					•
HP503058	5.8	.2283					•
HP503059	5.9	.2322					•
HP503060	6.0	.2362					•

EDP. No.	D		D ₂	L ₁	L ₂	L ₃	STOCK
	mm	inch					
HP503061	6.1	.2402	8	24	34	79	•
HP503062	6.2	.2441					•
HP503063	6.3	.2480					•
HP503064	6.4	.2520					•
HP503065	6.5	.2559					•
HP503066	6.6	.2598					•
HP503067	6.7	.2638					•
HP503068	6.8	.2677					•
HP503069	6.9	.2717					•
HP503070	7.0	.2756					•
HP503071	7.1	.2795	8	29	41	79	•
HP503072	7.2	.2835					•
HP503073	7.3	.2874					•
HP503074	7.4	.2913					•
HP503075	7.5	.2953					•
HP503076	7.6	.2992					•
HP503077	7.7	.3031					•
HP503078	7.8	.3071					•
HP503079	7.9	.3110					•
HP503080	8.0	.3150					•
HP503081	8.1	.3189	10	35	47	89	•
HP503082	8.2	.3228					•
HP503083	8.3	.3268					•
HP503084	8.4	.3307					•
HP503085	8.5	.3346					•
HP503086	8.6	.3386					•
HP503087	8.7	.3425					•
HP503088	8.8	.3465					•
HP503089	8.9	.3504					•
HP503090	9.0	.3543					•
HP503091	9.1	.3583					•

EDP. No.	D		D ₂	L ₁	L ₂	L ₃	STOCK
	mm	inch					
HP503092	9.2	.3622	10	35	47	89	•
HP503093	9.3	.3661					•
HP503094	9.4	.3701					•
HP503095	9.5	.3740					•
HP503096	9.6	.3780					•
HP503097	9.7	.3819					•
HP503098	9.8	.3858					•
HP503099	9.9	.3898					•
HP503100	10.0	.3937					•
HP503101	10.1	.3976					12
HP503102	10.2	.4016	•				
HP503103	10.3	.4055	•				
HP503104	10.4	.4094	•				
HP503105	10.5	.4134	•				
HP503106	10.6	.4173	•				
HP503107	10.7	.4213	•				
HP503108	10.8	.4252	•				
HP503109	10.9	.4291	•				
HP503110	11.0	.4331	•				
HP503111	11.1	.4370	•				
HP503112	11.2	.4409	•				
HP503113	11.3	.4449	•				
HP503114	11.4	.4488	•				
HP503115	11.5	.4528	•				
HP503116	11.6	.4567	•				
HP503117	11.7	.4606	•				
HP503118	11.8	.4646	•				
HP503119	11.9	.4685	•				
HP503120	12.0	.4724	•				

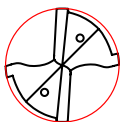
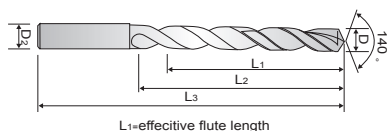
EDP. No.	D		D ₂	L ₁	L ₂	L ₃	STOCK
	mm	inch					
HP503121	12.1	.4764	14	43	60	107	•
HP503122	12.2	.4803					•
HP503123	12.3	.4843					•
HP503124	12.4	.4882					•
HP503125	12.5	.4921					•
HP503126	12.6	.4961					•
HP503127	12.7	.5000					•
HP503128	12.8	.5039					•
HP503129	12.9	.5079					•
HP503130	13.0	.5118					•
HP503131	13.1	.5157					•
HP503132	13.2	.5157					•
HP503133	13.3	.5236					•
HP503135	13.5	.5315					•
HP503137	13.7	.5394	•				
HP503140	14.0	.5512	•				
HP503142	14.2	.5591	16	45	65	115	•
HP503143	14.3	.5630					•
HP503145	14.5	.5709					•
HP503146	14.6	.5787					•
HP503148	14.8	.5827					•
HP503150	15.0	.5906					•
HP503155	15.5	.6102					•
HP503157	15.7	.6181					•
HP503160	16.0	.6299					•

■ 허용공차

㎜ = 1/1000mm

공차	외경	10이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하	18초과 300이하
인선부(m7)		+12 +2	+16 +4	+21 +6	+25 +7	+29 +8
생크부(h6)		0 -6	0 -8	0 -9	0 -11	0 -13

Power Max Drill



고정밀 5 X D / 내부급유형 POWER MAX DRILL-HIGH PRECISION

- 고정밀 구멍공차를 실현하였습니다.
- 관통구멍 및 단속구간에서 발생하는 떨림 및 채터링을 최소화하여 공구수명을 증대하였습니다.

HPI 503 ...series



EDP. No.	D			D ₂	L ₁	L ₂	L ₃	STOCK				
	mm	fraction	inch									
HPI 50303175	3.175	1/8	.1250	6	14	20	62	•				
HPI 50303264	3.264	-	.1285					•				
HPI 50303572	3.572	9/64	.1406					•				
HPI 5030397	3.97	5/32	.1563	6	17	24	66	•				
HPI 503040	4	-	.1590					•				
HPI 50304039	4.039	-	.1575					•				
HPI 503042	4.2	-	.1654					•				
HPI 503043	4.3	-	.1693					•				
HPI 503045	4.5	-	.1772					•				
HPI 503046	4.6	-	.1811					•				
HPI 50304763	4.763	3/16	.1875					6	20	28	66	•
HPI 503048	4.8	-	.1890	•								
HPI 503049	4.9	-	.1929	•								
HPI 503050	5	-	.1969	•								
HPI 503051	5.1	-	.2008	•								
HPI 50305159	5.159	13/64	.2031	•								
HPI 503052	5.2	-	.2047	•								
HPI 503053	5.3	-	.2087	•								
HPI 503054	5.4	-	.2126	•								
HPI 503055	5.5	-	.2165	•								
HPI 50305558	5.558	7/32	.2188	•								
HPI 503056	5.6	-	.2205	•								
HPI 503057	5.7	-	.2244	•								
HPI 503058	5.8	-	.2283	•								
HPI 50305953	5.953	15/64	.2344	•								
HPI 503060	6	-	.2362	•								
HPI 503062	6.2	-	.2441	8	24	34	79					•
HPI 5030635	6.35	1/4	.2500									•
HPI 503065	6.5	-	.2559									•
HPI 503066	6.6	-	.2598									•
HPI 50306747	6.747	17/64	.2656					•				
HPI 503068	6.8	-	.2677					•				
HPI 503070	7	-	.2756					•				
HPI 50307145	7.145	9/32	.2813	8	29	41	79	•				
HPI 503072	7.2	-	.2835					•				
HPI 503074	7.4	-	.2913					•				
HPI 503075	7.5	-	.2953					•				
HPI 50307541	7.541	19/64	.2969					•				

EDP. No.	D			D ₂	L ₁	L ₂	L ₃	STOCK
	mm	fraction	inch					
HPI 503078	7.8	-	.3071	8	29	41	79	•
HPI 503079	7.9	-	.3110					•
HPI 50307938	7.938	5/16	.3125					•
HPI 503080	8	-	.3150					•
HPI 503081	8.1	-	.3189	10	35	47	89	•
HPI 503082	8.2	-	.3228					•
HPI 503083	8.3	-	.3268					•
HPI 50308334	8.334	21/64	.3281					•
HPI 503085	8.5	-	.3346					•
HPI 503086	8.6	-	.3386					•
HPI 503087	8.7	-	.3425					•
HPI 50308733	8.733	11/32	.3438					•
HPI 503088	8.8	-	.3465					•
HPI 503090	9	-	.3543					•
HPI 503091	9.1	-	.3583					•
HPI 50309129	9.129	23/64	.3594					•
HPI 503092	9.2	-	.3622					•
HPI 503093	9.3	-	.3661					•
HPI 503095	9.5	-	.3740					•
HPI 50309525	9.525	3/8	.3750					•
HPI 503096	9.6	-	.3780					•
HPI 503097	9.7	-	.3819	•				
HPI 503098	9.8	-	.3858	•				
HPI 50309921	9.921	25/64	.3906	•				
HPI 503100	10	-	.3937	•				
HPI 503102	10.2	-	.4016	12	40	55	105	•
HPI 5031032	10.32	13/32	.4063					•
HPI 503105	10.5	-	.4134					•
HPI 503107	10.7	-	.4213					•
HPI 50310716	10.716	27/64	.4219					•
HPI 503108	10.8	-	.4252					•
HPI 503110	11	-	.4331					•
HPI 50311113	11.113	7/16	.4375					•
HPI 503112	11.2	-	.4409					•
HPI 503115	11.5	-	.4528					•
HPI 50311509	11.509	29/64	.4531					•
HPI 503117	11.7	-	.4606					•
HPI 50311908	11.908	15/32	.4688					•

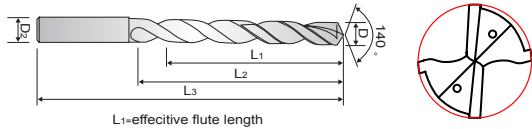
Power Max Drill

EDP. No.	D			D ₂	L ₁	L ₂	L ₃	STOCK
	mm	fraction	inch					
HPI 503120	12	-	.4724	12	40	55	105	•
HPI 503123	12.3	-	.4843	14	43	60	107	•
HPI 50312304	12.304	31/64	.4844					•
HPI 503125	12.5	-	.4921					•
HPI 503127	12.7	1/2	.5000					•
HPI 503128	12.8	-	.5039					•
HPI 503130	13	-	.5118					•
HPI 503133	13.3	-	.5236					•
HPI 50313494	13.494	17/32	.5313					•
HPI 503135	13.5	-	.5315					•
HPI 503137	13.7	-	.5394					•
HPI 50313891	13.891	35/64	.5469					•
HPI 503140	14	-	.5512					•
HPI 503141	14.1	-	.5551					16
HPI 503142	14.2	-	.5591	•				
HPI 50314288	14.288	9/16	.5625	•				
HPI 503145	14.5	-	.5709	•				
HPI 503147	14.7	-	.5787	•				
HPI 503150	15	-	.5906	•				
HPI 50315081	15.081	19/32	.5937	•				
HPI 503155	15.5	-	.6102	•				
HPI 50315875	15.875	5/8	.6250	•				
HPI 503160	16	-	.6299	•				
HPI 503165	16.5	-	.6496	18	51	73	123	
HPI 503168	16.8	-	.6614					•
HPI 503170	17	-	.6693					•
HPI 503171	17.1	-	.6732					•
HPI 50317463	17.463	11/16	.6875					•
HPI 503175	17.5	-	.6890					•
HPI 503180	18	-	.7087					•
HPI 503190	19	-	.7480	20	55	79	131	•
HPI 5031905	19.05	3/4	.7500					•
HPI 503197	19.7	-	.7756					•
HPI 503200	20	-	.7874					•

■ 허용공차 μm=1/1000mm

공차	외경	1이상 3이하	3초과 6이하	6초과 10이하	10초과 18이하	18초과 30이하
인선부(m7)	+12	+16	+21	+25	+29	
	+2	+4	+6	+7	+8	
생크부(h6)	0	0	0	0	0	
	-6	-8	-9	-11	-13	

Power Max Drill



L1=effective flute length

고정밀 5 X D / 내부급유형 POWER MAX DRILL-HIGH PRECISION

- 고정밀 구멍공차를 실현하였습니다.
- 관통구멍 및 단속구간에서 발생하는 떨림 및 채터링을 최소화하여 공구수명을 증대하였습니다.

HPI 505 ...series



EDP. No.	D			D ₂	L ₁	L ₂	L ₃	STOCK				
	mm	fraction	inch									
HPI 50503175	3.175	1/8	.1250	6	24	30	66	•				
HPI 50503264	3.264	-	.1285					•				
HPI 50503572	3.572	9/64	.1406					•				
HPI 5050397	3.97	5/32	.1563	6	29	36	74	•				
HPI 505040	4	-	.1575					•				
HPI 50504039	4.039	-	.1590					•				
HPI 505041	4.1	-	.1614					•				
HPI 505042	4.2	-	.1654					•				
HPI 505043	4.3	-	.1693					•				
HPI 505044	4.4	-	.1732					•				
HPI 505045	4.5	-	.1772					•				
HPI 5050458	4.58	-	.1803					•				
HPI 505046	4.6	-	.1811					•				
HPI 50504623	4.623	-	.1820					•				
HPI 505047	4.7	-	.1850					•				
HPI 50504763	4.763	3/16	.1875					6	35	44	82	•
HPI 505048	4.8	-	.1890									•
HPI 505049	4.9	-	.1920									•
HPI 505050	5	-	.1969	•								
HPI 505051	5.1	-	.2008	•								
HPI 50505159	5.159	13/64	.2031	•								
HPI 505052	5.2	-	.2047	•								
HPI 505053	5.3	-	.2087	•								
HPI 505054	5.4	-	.2126	•								
HPI 5050541	5.41	-	.2130	•								
HPI 505055	5.5	-	.2165	•								
HPI 50505558	5.558	7/32	.2188	•								
HPI 505056	5.6	-	.2205	•								
HPI 505057	5.7	-	.2244	•								
HPI 505058	5.8	-	.2283	•								
HPI 505059	5.9	-	.2323	•								
HPI 50505953	5.953	15/64	.2344	•								
HPI 505060	6	-	.2362	•								

EDP. No.	D			D ₂	L ₁	L ₂	L ₃	STOCK
	mm	fraction	inch					
HPI 505061	6.1	-	.2402	8	43	53	91	•
HPI 505062	6.2	-	.2441					•
HPI 505063	6.3	-	.2480					•
HPI 5050635	6.35	1/4	.2500					•
HPI 505064	6.4	-	.2520					•
HPI 505065	6.5	-	.2559					•
HPI 50506528	6.528	-	.2570					•
HPI 505066	6.6	-	.2598					•
HPI 505067	6.7	-	.2638					•
HPI 50506747	6.747	17/64	.2656					•
HPI 505068	6.8	-	.2677					•
HPI 505069	6.9	-	.2717					•
HPI 50506909	6.909	-	.2720					•
HPI 505070	7	-	.2756					•
HPI 505071	7.1	-	.2795					•
HPI 50507145	7.145	9/32	.2813					•
HPI 505072	7.2	-	.2835					•
HPI 505073	7.3	-	.2874					•
HPI 505074	7.4	-	.2913					•
HPI 505075	7.5	-	.2953					•
HPI 50507541	7.541	19/64	.2969					•
HPI 505076	7.6	-	.2992					•
HPI 505077	7.7	-	.3031					•
HPI 505078	7.8	-	.3071					•
HPI 505079	7.9	-	.3110					•
HPI 50507938	7.938	5/16	.3125					•
HPI 505080	8	-	.3150					•
HPI 505081	8.1	-	.3189					10
HPI 505082	8.2	-	.3228	•				
HPI 505083	8.3	-	.3268	•				
HPI 50508334	8.334	21/64	.3281	•				
HPI 505084	8.4	-	.3307	•				
HPI 50508433	8.433	-	.3320	•				
HPI 505085	8.5	-	.3346	•				
HPI 505086	8.6	-	.3386	•				
HPI 505087	8.7	-	.3425	•				
HPI 50508733	8.733	11/32	.3438	•				

EDP. No.	D			D ₂	L ₁	L ₂	L ₃	STOCK
	mm	fraction	inch					
HPI 505088	8.8	-	.3465	10	49	61	103	•
HPI 505089	8.9	-	.3504					•
HPI 505090	9	-	.3543					•
HPI 505091	9.1	-	.3583					•
HPI 50509129	9.129	23/64	.3594					•
HPI 505092	9.2	-	.3622					•
HPI 505093	9.3	-	.3661					•
HPI 50509347	9.347	-	.3680					•
HPI 505094	9.4	-	.3701					•
HPI 505095	9.5	-	.3740					•
HPI 50509525	9.525	3/8	.3750					•
HPI 505096	9.6	-	.3780					•
HPI 505097	9.7	-	.3819					•
HPI 50509703	9.703	-	.3858					•
HPI 50509746	9.746	-	.3898					•
HPI 505098	9.8	-	.3906					•
HPI 505099	9.9	-	.3937					•
HPI 50509921	9.921	25/64	.3976					•
HPI 505100	10	-	.4016					•
HPI 505101	10.1	-	.4055					12
HPI 505102	10.2	-	.4063	•				
HPI 505103	10.3	-	.4094	•				
HPI 5051032	10.32	13/32	.4134	•				
HPI 505104	10.4	-	.4173	•				
HPI 505105	10.5	-	.4213	•				
HPI 505106	10.6	-	.4219	•				
HPI 505107	10.7	-	.4252	•				
HPI 50510716	10.716	27/64	.4291	•				
HPI 505108	10.8	-	.4331	•				
HPI 505109	10.9	-	.4370	•				
HPI 505110	11	-	.4375	•				
HPI 505111	11.1	-	.4409	•				
HPI 50511113	11.113	7/16	.4449	•				
HPI 505112	11.2	-	.4488	•				
HPI 505113	11.3	-	.4528	•				
HPI 505114	11.4	-	.4488	•				
HPI 505115	11.5	-	.4528	•				

EDP. No.	D			D ₂	L ₁	L ₂	L ₃	STOCK
	mm	fraction	inch					
HPI 50511509	11.509	29/64	.4531	12	56	71	118	•
HPI 505116	11.6	-	.4567					•
HPI 505117	11.7	-	.4606					•
HPI 505118	11.8	-	.4646					•
HPI 505119	11.9	-	.4685					•
HPI 50511908	11.908	15/32	.4688					•
HPI 505120	12	-	.4724					•
HPI 505121	12.1	-	.4764	14	60	77	124	•
HPI 505122	12.2	-	.4803					•
HPI 505123	12.3	-	.4843					•
HPI 50512304	12.304	31/64	.4844					•
HPI 505124	12.4	-	.4882					•
HPI 505125	12.5	-	.4921					•
HPI 505126	12.6	-	.4961					•
HPI 505127	12.7	1/2	.5000					•
HPI 505128	12.8	-	.5039					•
HPI 505129	12.9	-	.5079					•
HPI 50512903	12.903	-	.5118					•
HPI 505130	13	-	.5156					•
HPI 50513096	13.096	33/64	.5157					•
HPI 505131	13.1	-	.5236					•
HPI 505133	13.3	-	.5313					•
HPI 50513494	13.494	17/32	.5315					•
HPI 505135	13.5	-	.5394					•
HPI 505137	13.7	-	.5433	•				
HPI 505138	13.8	-	.5469	•				
HPI 50513891	13.891	35/64	.5512	•				
HPI 505140	14	-	.5591	•				
HPI 505142	14.2	-	.5625	16	63	83	133	•
HPI 50514288	14.288	9/16	.5709					•
HPI 505145	14.5	-	.5748					•
HPI 505146	14.6	-	.5787					•
HPI 505147	14.7	-	.5866					•
HPI 505149	14.9	-	.5906					•
HPI 505150	15	-	.5937					•
HPI 50515081	15.081	19/32	.5945					•
HPI 505151	15.1	-	.5945					•

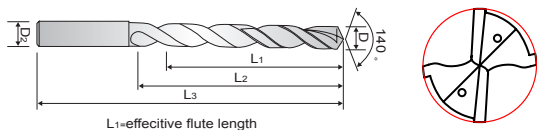
EDP. No.	D			D ₂	L ₁	L ₂	L ₃	STOCK				
	mm	fraction	inch									
HPI 505155	15.5	-	.6102	18	63	83	133	•				
HPI 505157	15.7	-	.6181					•				
HPI 505158	15.8	-	.6220					•				
HPI 50515875	15.875	5/8	.6250					•				
HPI 505159	15.9	-	.6260					•				
HPI 505160	16	-	.6299					•				
HPI 50516078	16.078	-	.6330	18	71	93	143	•				
HPI 505162	16.2	-	.6378					•				
HPI 505164	16.4	-	.6457					•				
HPI 505165	16.5	-	.6496					•				
HPI 505166	16.6	-	.6535					•				
HPI 50516667	16.667	21/32	.6562					•				
HPI 505167	16.7	-	.6575					•				
HPI 505170	17	-	.6693					•				
HPI 50517463	17.463	11/16	.6875					•				
HPI 505175	17.5	-	.6890					•				
HPI 505177	17.7	-	.6969					•				
HPI 505180	18	-	.7087					•				
HPI 505184	18.4	-	.7244					20	77	101	153	•
HPI 505185	18.5	-	.7283									•
HPI 505186	18.6	-	.7323	•								
HPI 505188	18.8	-	.7402	•								
HPI 505190	19	-	.7480	•								
HPI 5051905	19.05	3/4	.7500	•								
HPI 505192	19.2	-	.7559	•								
HPI 50519253	19.253	-	.7580	•								
HPI 50519446	19.446	49/64	.7656	•								
HPI 505195	19.5	-	.7677	•								
HPI 505197	19.7	-	.7756	•								
HPI 505200	20	-	.7874	•								

■ 허용공차

mm = 1/1000mm

공차	외경	10이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하	18초과 300이하
인선부(m7)		+12 +2	+16 +4	+21 +6	+25 +7	+29 +8
생크부(h6)		0 -6	0 -8	0 -9	0 -11	0 -13

Power Max Drill



고정밀 8 X D / 내부급유형 POWER MAX DRILL-HIGH PRECISION

- 고정밀 구멍공차를 실현하였습니다.
- 관통구멍 및 단속구간에서 발생하는 떨림 및 채터링을 최소화하여 공구수명을 증대하였습니다.

HPI 508 ...series



EDP. No.	D			D ₂	L ₁	L ₂	L ₃	STOCK
	mm	fraction	inch					
HPI 50803175	3.175	1/8	.1250	6	37	43	80	•
HPI 50803264	3.264	-	.1285					•
HPI 50803572	3.572	9/64	.1406					•
HPI 5080397	3.97	5/32	.1563	6	41	49	87	•
HPI 50804039	4.039	-	.1590					•
HPI 50804763	4.763	3/16	.1875	6	48	56	94	•
HPI 508050	5	-	.1969					•
HPI 508051	5.1	-	.2008					•
HPI 50805159	5.159	13/64	.2031					•
HPI 508052	5.2	-	.2047					•
HPI 508053	5.3	-	.2087					•
HPI 508055	5.5	-	.2165					•
HPI 50805558	5.558	7/32	.2188					•
HPI 508057	5.7	-	.2244					•
HPI 50805953	5.953	15/64	.2344					•
HPI 508060	6	-	.2362	8	57	67	105	•
HPI 508061	6.1	-	.2402					•
HPI 508062	6.2	-	.2441					•
HPI 508063	6.3	-	.2480					•
HPI 5080635	6.35	1/4	.2500					•
HPI 508064	6.4	-	.2520					•
HPI 508065	6.5	-	.2559					•
HPI 508066	6.6	-	.2598					•
HPI 508067	6.7	-	.2638					•
HPI 50806746	6.746	17/64	.2656					•
HPI 508068	6.8	-	.2677	•				
HPI 508070	7	-	.2756	8	61	72	110	•
HPI 50807145	7.145	9/32	.2813					•
HPI 508075	7.5	-	.2953					•
HPI 50807541	7.541	19/64	.2969					•
HPI 508077	7.7	-	.3031					•
HPI 508078	7.8	-	.3071					•
HPI 50807938	7.938	5/16	.3125	10	68	80	122	•
HPI 508080	8	-	.3150					•
HPI 508081	8.1	-	.3189	10	68	80	122	•
HPI 50808334	8.334	21/64	.3281					•

EDP. No.	D			D ₂	L ₁	L ₂	L ₃	STOCK				
	mm	fraction	inch									
HPI 508085	8.5	-	.3346	10	68	80	122	•				
HPI 508086	8.6	-	.3386					•				
HPI 508087	8.7	-	.3425					•				
HPI 50808733	8.733	11/32	.3438					•				
HPI 508088	8.8	-	.3465					•				
HPI 508090	9	-	.3543					•				
HPI 508091	9.1	-	.3583					•				
HPI 50809129	9.129	23/64	.3594					•				
HPI 508095	9.5	-	.3740					•				
HPI 50809525	9.525	3/8	.3750					•				
HPI 508097	9.7	-	.3819					•				
HPI 508098	9.8	-	.3858					•				
HPI 508099	9.9	-	.3898					•				
HPI 50809921	9.921	25/64	.3906					•				
HPI 508100	10	-	.3937					•				
HPI 508101	10.1	-	.3976					12	79	94	141	•
HPI 508102	10.2	-	.4016									•
HPI 508103	10.3	-	.4055									•
HPI 5081032	10.32	13/32	.4063	•								
HPI 508105	10.5	-	.4134	•								
HPI 50810716	10.716	27/64	.4219	•								
HPI 508108	10.8	-	.4252	•								
HPI 508110	11	-	.4331	•								
HPI 50811113	11.113	7/16	.4375	•								
HPI 508112	11.2	-	.4409	•								
HPI 508113	11.3	-	.4449	•								
HPI 508114	11.4	-	.4488	•								
HPI 508115	11.5	-	.4528	•								
HPI 50811509	11.509	29/64	.4531	•								
HPI 508117	11.7	-	.4606	•								
HPI 508118	11.8	-	.4646	•								
HPI 50811908	11.908	15/32	.4688	•								
HPI 508120	12	-	.4724	•								
HPI 50812304	12.304	31/64	.4844	14	91	108	155	•				
HPI 508125	12.5	-	.4921					•				
HPI 508127	12.7	1/2	.5000					•				

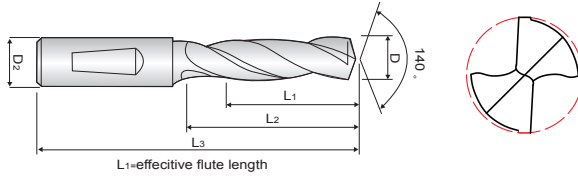
EDP. No.	D			D ₂	L ₁	L ₂	L ₃	STOCK
	mm	fraction	inch					
HPI 508128	12.8	-	.5039	14	91	108	155	•
HPI 508130	13	-	.5118					•
HPI 508135	13.5	-	.5315					•
HPI 508140	14	-	.5512					•
HPI 50814288	14.288	9/16	.5625	16	101	121	171	•
HPI 508145	14.5	-	.5709					•
HPI 508150	15	-	.5906					•
HPI 508151	15.1	-	.5945					•
HPI 508152	15.2	-	.5984					•
HPI 508153	15.3	-	.6024					•
HPI 508155	15.5	-	.6102					•
HPI 508158	15.8	-	.6220					•
HPI 50815875	15.875	5/8	.6250					•
HPI 508160	16	-	.6299					•
HPI 50816078	16.078	-	.6330					18
HPI 508162	16.2	-	.6378	•				
HPI 508165	16.5	-	.6496	•				
HPI 508170	17	-	.6693	•				
HPI 50817463	17.463	11/16	.6875	•				
HPI 508175	17.5	-	.6890	•				
HPI 508180	18	-	.7087	•				
HPI 508185	18.5	-	.7283	20	124	148	200	•
HPI 508190	19	-	.7480					•
HPI 5081905	19.05	3/4	.7500					•
HPI 50819253	19.253	-	.7580					•
HPI 508198	19.8	-	.7795					•
HPI 508200	20	-	.7874					•

■ 허용공차

μm=1/1000mm

공차	외경	μm=1/1000mm				
		1이상 3이하	3초과 6이하	6초과 10이하	10초과 18이하	18초과 30이하
인선부(m7)		+12	+16	+21	+25	+29
		+2	+4	+6	+7	+8
생크부(h6)		0	0	0	0	0
		-6	-8	-9	-11	-13

Power Max Drill



POWER MAX DRILL – STUB / DIN 6537K

- Shank Form
- P503A : DIN 6535 HA – straight A type
- P503F : DIN 6535 HE – 2°Whistle Flat F type

P503A / P503F ...series



EDP. No.	EDP. No.	D	D ₂	L ₁	L ₂	L ₃	STOCK
P503A030	P503F030	3.0	6	14	20	62	
P503A031	P503F031	3.1					
P503A032	P503F032	3.2					
P503A033	P503F033	3.3					
P503A034	P503F034	3.4					
P503A035	P503F035	3.5					
P503A036	P503F036	3.6					
P503A037	P503F037	3.7					
P503A038	P503F038	3.8	6	17	24	66	
P503A039	P503F039	3.9					
P503A040	P503F040	4.0					
P503A041	P503F041	4.1					
P503A042	P503F042	4.2					
P503A043	P503F043	4.3					
P503A044	P503F044	4.4					
P503A045	P503F045	4.5					
P503A046	P503F046	4.6					
P503A047	P503F047	4.7					
P503A048	P503F048	4.8	6	20	28	66	
P503A049	P503F049	4.9					
P503A050	P503F050	5.0					
P503A051	P503F051	5.1					
P503A052	P503F052	5.2					
P503A053	P503F053	5.3					
P503A054	P503F054	5.4					
P503A055	P503F055	5.5					
P503A056	P503F056	5.6					
P503A057	P503F057	5.7					
P503A058	P503F058	5.8					
P503A059	P503F059	5.9					
P503A060	P503F060	6.0					
P503A061	P503F061	6.1	8	24	34	79	
P503A062	P503F062	6.2					
P503A063	P503F063	6.3					
P503A064	P503F064	6.4					
P503A065	P503F065	6.5					
P503A066	P503F066	6.6					

Data • p360

※ 상기 제품은 고객의 주문 시 생산합니다.

EDP. No.	EDP. No.	D	D ₂	L ₁	L ₂	L ₃	STOCK
P503A067	P503F067	6.7	8	24	34	79	
P503A068	P503F068	6.8					
P503A069	P503F069	6.9					
P503A070	P503F070	7.0					
P503A071	P503F071	7.1	8	29	41	79	
P503A072	P503F072	7.2					
P503A073	P503F073	7.3					
P503A074	P503F074	7.4					
P503A075	P503F075	7.5					
P503A076	P503F076	7.6					
P503A077	P503F077	7.7					
P503A078	P503F078	7.8					
P503A079	P503F079	7.9					
P503A080	P503F080	8.0					
P503A081	P503F081	8.1	10	35	47	89	
P503A082	P503F082	8.2					
P503A083	P503F083	8.3					
P503A084	P503F084	8.4					
P503A085	P503F085	8.5					
P503A086	P503F086	8.6					
P503A087	P503F087	8.7					
P503A088	P503F088	8.8					
P503A089	P503F089	8.9					
P503A090	P503F090	9.0					
P503A091	P503F091	9.1					
P503A092	P503F092	9.2					
P503A093	P503F093	9.3					
P503A094	P503F094	9.4					
P503A095	P503F095	9.5					
P503A096	P503F096	9.6					
P503A097	P503F097	9.7					
P503A098	P503F098	9.8					
P503A099	P503F099	9.9					
P503A100	P503F100	10.0					
P503A101	P503F101	10.1	12	40	55	102	
P503A102	P503F102	10.2					
P503A103	P503F103	10.3					

Data • p360

※ 상기 제품은 고객의 주문 시 생산합니다.

EDP. No.	EDP. No.	D	D ₂	L ₁	L ₂	L ₃	STOCK
P503A104	P503F104	10.4					
P503A105	P503F105	10.5					
P503A106	P503F106	10.6					
P503A107	P503F107	10.7					
P503A108	P503F108	10.8					
P503A109	P503F109	10.9					
P503A110	P503F110	11.0					
P503A111	P503F111	11.1					
P503A112	P503F112	11.2	12	40	55	102	
P503A113	P503F113	11.3					
P503A114	P503F114	11.4					
P503A115	P503F115	11.5					
P503A116	P503F116	11.6					
P503A117	P503F117	11.7					
P503A118	P503F118	11.8					
P503A119	P503F119	11.9					
P503A120	P503F120	12.0					
P503A121	P503F121	12.1					
P503A122	P503F122	12.2					
P503A123	P503F123	12.3					
P503A124	P503F124	12.4					
P503A125	P503F125	12.5					
P503A126	P503F126	12.6					
P503A127	P503F127	12.7					
P503A128	P503F128	12.8					
P503A129	P503F129	12.9					
P503A130	P503F130	13.0					
P503A131	P503F131	13.1	14	43	60	107	
P503A132	P503F132	13.2					
P503A133	P503F133	13.3					
P503A134	P503F134	13.4					
P503A135	P503F135	13.5					
P503A136	P503F136	13.6					
P503A137	P503F137	13.7					
P503A138	P503F138	13.8					
P503A139	P503F139	13.9					
P503A140	P503F140	14.0					

Data • p360

※ 상기 제품은 고객의 주문 시 생산합니다.

EDP. No.	EDP. No.	D	D ₂	L ₁	L ₂	L ₃	STOCK
P503A141	P503F141	14.1					
P503A142	P503F142	14.2					
P503A143	P503F143	14.3					
P503A144	P503F144	14.4					
P503A145	P503F145	14.5					
P503A146	P503F146	14.6					
P503A147	P503F147	14.7					
P503A148	P503F148	14.8					
P503A149	P503F149	14.9					
P503A150	P503F150	15.0	16	45	65	115	
P503A151	P503F151	15.1					
P503A152	P503F152	15.2					
P503A153	P503F153	15.3					
P503A154	P503F154	15.4					
P503A155	P503F155	15.5					
P503A156	P503F156	15.6					
P503A157	P503F157	15.7					
P503A158	P503F158	15.8					
P503A159	P503F159	15.9					
P503A160	P503F160	16.0					
P503A161	P503F161	16.1					
P503A163	P503F163	16.3					
P503A165	P503F165	16.5					
P503A170	P503F170	17.0					
P503A171	P503F171	17.1	18	51	73	123	
P503A172	P503F172	17.2					
P503A175	P503F175	17.5					
P503A177	P503F177	17.7					
P503A178	P503F178	17.8					
P503A180	P503F180	18.0					
P503A181	P503F181	18.1					
P503A182	P503F182	18.2					
P503A185	P503F185	18.5					
P503A190	P503F190	19.0	20	55	79	131	
P503A191	P503F191	19.1					
P503A195	P503F195	19.5					
P503A197	P503F197	19.7					
P503A200	P503F200	20.0					

Data • p360

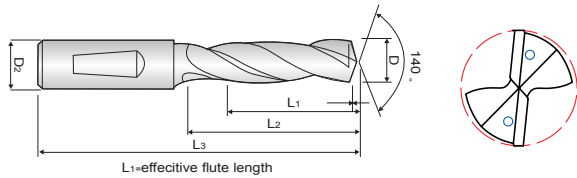
※ 상기 제품은 고객의 주문 시 생산합니다.

■ 허용공차

μm=1/1000mm

공차	외경	10초과 30이하				3초과 60이하		6초과 100이하		10초과 180이하		18초과 300이하	
		+12	+2	+16	+4	+21	+6	+25	+7	+29	+8	0	0
인선부(m7)													
생크부(h6)													

Power Max Drill



POWER MX DRILL STUB INTERNAL COOLANT / DIN 6537K

- Shank Form
- PI503A : DIN 6535 HA – straight A type
- PI503F : DIN 6535 HE – 2°Whistle Flat F type

PI503A / PI503F ...series



EDP. No.	EDP. No.	D	D ₂	L ₁	L ₂	L ₃	STOCK
PI503A030	PI503F030	3.0	6	14	20	62	
PI503A031	PI503F031	3.1					
PI503A032	PI503F032	3.2					
PI503A033	PI503F033	3.3					
PI503A034	PI503F034	3.4					
PI503A035	PI503F035	3.5					
PI503A036	PI503F036	3.6					
PI503A037	PI503F037	3.7					
PI503A038	PI503F038	3.8	6	17	24	66	
PI503A039	PI503F039	3.9					
PI503A040	PI503F040	4.0					
PI503A041	PI503F041	4.1					
PI503A042	PI503F042	4.2					
PI503A043	PI503F043	4.3					
PI503A044	PI503F044	4.4					
PI503A045	PI503F045	4.5					
PI503A046	PI503F046	4.6					
PI503A047	PI503F047	4.7					
PI503A048	PI503F048	4.8	6	20	28	66	
PI503A049	PI503F049	4.9					
PI503A050	PI503F050	5.0					
PI503A051	PI503F051	5.1					
PI503A052	PI503F052	5.2					
PI503A053	PI503F053	5.3					
PI503A054	PI503F054	5.4					
PI503A055	PI503F055	5.5					
PI503A056	PI503F056	5.6					
PI503A057	PI503F057	5.7					
PI503A058	PI503F058	5.8					
PI503A059	PI503F059	5.9					
PI503A060	PI503F060	6.0					
PI503A061	PI503F061	6.1	8	24	34	79	
PI503A062	PI503F062	6.2					
PI503A063	PI503F063	6.3					
PI503A064	PI503F064	6.4					
PI503A065	PI503F065	6.5					
PI503A066	PI503F066	6.6					

Data • p360

※ 상기 제품은 고객의 주문 시 생산합니다.

EDP. No.	EDP. No.	D	D ₂	L ₁	L ₂	L ₃	STOCK
PI503A067	PI503F067	6.7	8	24	34	79	
PI503A068	PI503F068	6.8					
PI503A069	PI503F069	6.9					
PI503A070	PI503F070	7.0					
PI503A071	PI503F071	7.1	8	29	41	79	
PI503A072	PI503F072	7.2					
PI503A073	PI503F073	7.3					
PI503A074	PI503F074	7.4					
PI503A075	PI503F075	7.5					
PI503A076	PI503F076	7.6					
PI503A077	PI503F077	7.7					
PI503A078	PI503F078	7.8					
PI503A079	PI503F079	7.9					
PI503A080	PI503F080	8.0					
PI503A081	PI503F081	8.1					
PI503A082	PI503F082	8.2					
PI503A083	PI503F083	8.3					
PI503A084	PI503F084	8.4					
PI503A085	PI503F085	8.5					
PI503A086	PI503F086	8.6					
PI503A087	PI503F087	8.7					
PI503A088	PI503F088	8.8					
PI503A089	PI503F089	8.9					
PI503A090	PI503F090	9.0					
PI503A091	PI503F091	9.1					
PI503A092	PI503F092	9.2					
PI503A093	PI503F093	9.3					
PI503A094	PI503F094	9.4					
PI503A095	PI503F095	9.5					
PI503A096	PI503F096	9.6					
PI503A097	PI503F097	9.7					
PI503A098	PI503F098	9.8					
PI503A099	PI503F099	9.9					
PI503A100	PI503F100	10.0					
PI503A101	PI503F101	10.1	12	40	55	102	
PI503A102	PI503F102	10.2					
PI503A103	PI503F103	10.3					

※ 상기 제품은 고객의 주문 시 생산합니다.

Data • p360

EDP. No.	EDP. No.	D ₁	D ₂	L ₁	L ₂	L ₃	STOCK
PI503A104	PI503F104	10.4					
PI503A105	PI503F105	10.5					
PI503A106	PI503F106	10.6					
PI503A107	PI503F107	10.7					
PI503A108	PI503F108	10.8					
PI503A109	PI503F109	10.9					
PI503A110	PI503F110	11.0					
PI503A111	PI503F111	11.1					
PI503A112	PI503F112	11.2	12	40	55	102	
PI503A113	PI503F113	11.3					
PI503A114	PI503F114	11.4					
PI503A115	PI503F115	11.5					
PI503A116	PI503F116	11.6					
PI503A117	PI503F117	11.7					
PI503A118	PI503F118	11.8					
PI503A119	PI503F119	11.9					
PI503A120	PI503F120	12.0					
PI503A121	PI503F121	12.1					
PI503A122	PI503F122	12.2					
PI503A123	PI503F123	12.3					
PI503A124	PI503F124	12.4					
PI503A125	PI503F125	12.5					
PI503A126	PI503F126	12.6					
PI503A127	PI503F127	12.7					
PI503A128	PI503F128	12.8					
PI503A129	PI503F129	12.9					
PI503A130	PI503F130	13.0	14	43	60	107	
PI503A131	PI503F131	13.1					
PI503A132	PI503F132	13.2					
PI503A133	PI503F133	13.3					
PI503A134	PI503F134	13.4					
PI503A135	PI503F135	13.5					
PI503A136	PI503F136	13.6					
PI503A137	PI503F137	13.7					
PI503A138	PI503F138	13.8					
PI503A139	PI503F139	13.9					
PI503A140	PI503F140	14.0					

※ 상기 제품은 고객의 주문 시 생산합니다.
Data • p360

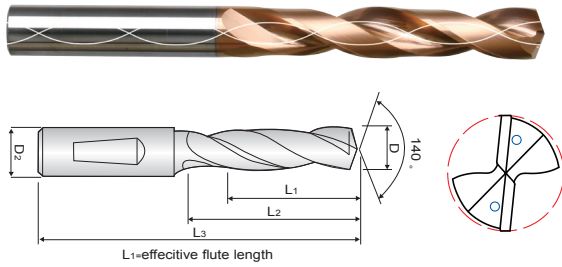
EDP. No.	EDP. No.	D	D ₂	L ₁	L ₂	L ₃	STOCK
PI503A141	PI503F141	14.1					
PI503A142	PI503F142	14.2					
PI503A143	PI503F143	14.3					
PI503A144	PI503F144	14.4					
PI503A145	PI503F145	14.5					
PI503A146	PI503F146	14.6					
PI503A147	PI503F147	14.7					
PI503A148	PI503F148	14.8					
PI503A149	PI503F149	14.9					
PI503A150	PI503F150	15.0	16	45	65	115	
PI503A151	PI503F151	15.1					
PI503A152	PI503F152	15.2					
PI503A153	PI503F153	15.3					
PI503A154	PI503F154	15.4					
PI503A155	PI503F155	15.5					
PI503A156	PI503F156	15.6					
PI503A157	PI503F157	15.7					
PI503A158	PI503F158	15.8					
PI503A159	PI503F159	15.9					
PI503A160	PI503F160	16.0					
PI503A161	PI503F161	16.1					
PI503A163	PI503F163	16.3					
PI503A165	PI503F165	16.5					
PI503A170	PI503F170	17.0					
PI503A171	PI503F171	17.1	18	51	73	123	
PI503A172	PI503F172	17.2					
PI503A175	PI503F175	17.5					
PI503A177	PI503F177	17.7					
PI503A178	PI503F178	17.8					
PI503A180	PI503F180	18.0					
PI503A181	PI503F181	18.1					
PI503A182	PI503F182	18.2					
PI503A185	PI503F185	18.5					
PI503A190	PI503F190	19.0	20	55	79	131	
PI503A191	PI503F191	19.1					
PI503A195	PI503F195	19.5					
PI503A197	PI503F197	19.7					
PI503A200	PI503F200	20.0					

※ 상기 제품은 고객의 주문 시 생산합니다.
Data • p360

■ 허용공차 μm=1/1000mm

공차	외경				
	1이상 3이하	3초과 6이하	6초과 10이하	10초과 18이하	18초과 30이하
인선부(m7)	+12 +2	+16 +4	+21 +6	+25 +7	+29 +8
생크부(h6)	0 -6	0 -8	0 -9	0 -11	0 -13

Power Max Drill



DIN 6537L / 내부급유형
MEDIUM INTERNAL COOLANT

- Shank Form
- PI505A : DIN 6535 HA – straight A type
- PI505F : DIN 6535 HE – 2°Whistle Flat F type

PI505A / PI505F ...series



EDP. No.	EDP. No.	D	D ₂	L ₁	L ₂	L ₃	STOCK
PI505A040	PI505F040	4.0	6	29	36	74	
PI505A041	PI505F041	4.1					
PI505A042	PI505F042	4.2					
PI505A043	PI505F043	4.3					
PI505A044	PI505F044	4.4					
PI505A045	PI505F045	4.5					
PI505A046	PI505F046	4.6					
PI505A047	PI505F047	4.7					
PI505A048	PI505F048	4.8	6	35	44	82	
PI505A049	PI505F049	4.9					
PI505A050	PI505F050	5.0					
PI505A051	PI505F051	5.1					
PI505A052	PI505F052	5.2					
PI505A053	PI505F053	5.3					
PI505A054	PI505F054	5.4					
PI505A055	PI505F055	5.5					
PI505A056	PI505F056	5.6					
PI505A057	PI505F057	5.7					
PI505A058	PI505F058	5.8					
PI505A059	PI505F059	5.9					
PI505A060	PI505F060	6.0					
PI505A061	PI505F061	6.1	8	43	53	91	
PI505A062	PI505F062	6.2					
PI505A063	PI505F063	6.3					
PI505A064	PI505F064	6.4					
PI505A065	PI505F065	6.5					
PI505A066	PI505F066	6.6					
PI505A067	PI505F067	6.7					
PI505A068	PI505F068	6.8					
PI505A069	PI505F069	6.9					
PI505A070	PI505F070	7.0					
PI505A071	PI505F071	7.1					
PI505A072	PI505F072	7.2					
PI505A073	PI505F073	7.3					
PI505A074	PI505F074	7.4					
PI505A075	PI505F075	7.5					
PI505A076	PI505F076	7.6					

※ 상기 제품은 고객의 주문 시 생산합니다.
Data • p360

EDP. No.	EDP. No.	D	D ₂	L ₁	L ₂	L ₃	STOCK
PI505A077	PI505F077	7.7	8	43	53	91	
PI505A078	PI505F078	7.8					
PI505A079	PI505F079	7.9					
PI505A080	PI505F080	8.0					
PI505A081	PI505F081	8.1	10	49	61	103	
PI505A082	PI505F082	8.2					
PI505A083	PI505F083	8.3					
PI505A084	PI505F084	8.4					
PI505A085	PI505F085	8.5					
PI505A086	PI505F086	8.6					
PI505A087	PI505F087	8.7					
PI505A088	PI505F088	8.8					
PI505A089	PI505F089	8.9					
PI505A090	PI505F090	9.0					
PI505A091	PI505F091	9.1					
PI505A092	PI505F092	9.2					
PI505A093	PI505F093	9.3					
PI505A094	PI505F094	9.4					
PI505A095	PI505F095	9.5					
PI505A096	PI505F096	9.6					
PI505A097	PI505F097	9.7					
PI505A098	PI505F098	9.8					
PI505A099	PI505F099	9.9					
PI505A100	PI505F100	10.0					
PI505A101	PI505F101	10.1	12	56	71	118	
PI505A102	PI505F102	10.2					
PI505A103	PI505F103	10.3					
PI505A104	PI505F104	10.4					
PI505A105	PI505F105	10.5					
PI505A106	PI505F106	10.6					
PI505A107	PI505F107	10.7					
PI505A108	PI505F108	10.8					
PI505A109	PI505F109	10.9					
PI505A110	PI505F110	11.0					
PI505A111	PI505F111	11.1					
PI505A112	PI505F112	11.2					
PI505A113	PI505F113	11.3					

Data • p360

※ 상기 제품은 고객의 주문 시 생산합니다.

EDP. No.	EDP. No.	D	D ₂	L ₁	L ₂	L ₃	STOCK
PI505A114	PI503F104	11.4	12	56	71	118	
PI505A115	PI503F105	11.5					
PI505A116	PI503F106	11.6					
PI505A117	PI503F107	11.7					
PI505A118	PI503F108	11.8					
PI505A119	PI503F109	11.9					
PI505A120	PI503F110	12.0					
PI505A121	PI503F111	12.1	14	60	77	124	
PI505A122	PI503F112	12.2					
PI505A123	PI503F113	12.3					
PI505A124	PI503F114	12.4					
PI505A125	PI503F115	12.5					
PI505A126	PI503F116	12.6					
PI505A127	PI503F117	12.7					
PI505A128	PI503F118	12.8					
PI505A129	PI503F119	12.9					
PI505A130	PI503F120	13.0					
PI505A131	PI503F121	13.1					
PI505A132	PI503F122	13.2					
PI505A133	PI503F123	13.3					
PI505A134	PI503F124	13.4					
PI505A135	PI503F125	13.5					
PI505A136	PI503F126	13.6					
PI505A137	PI503F127	13.7					
PI505A138	PI503F128	13.8					
PI505A139	PI503F129	13.9					
PI505A140	PI503F130	14.0					
PI505A141	PI503F131	14.1	16	63	83	133	
PI505A142	PI503F132	14.2					
PI505A143	PI503F133	14.3					
PI505A144	PI503F134	14.4					
PI505A145	PI503F135	14.5					
PI505A146	PI503F136	14.6					
PI505A147	PI503F137	14.7					
PI505A148	PI503F138	14.8					
PI505A149	PI503F139	14.9					
PI505A150	PI503F140	15.0					

Data • p360

※ 상기 제품은 고객의 주문 시 생산합니다.

EDP. No.	EDP. No.	D	D ₂	L ₁	L ₂	L ₃	STOCK
PI505A151	PI505F151	15.1	16	63	83	133	
PI505A152	PI505F152	15.2					
PI505A153	PI505F153	15.3					
PI505A154	PI505F154	15.4					
PI505A155	PI505F155	15.5					
PI505A156	PI505F156	15.6					
PI505A157	PI505F157	15.7					
PI505A158	PI505F158	15.8					
PI505A159	PI505F159	15.9					
PI505A160	PI505F160	16.0					
PI505A161	PI505F161	16.1	18	71	93	143	
PI505A163	PI505F163	16.3					
PI505A165	PI505F165	16.5					
PI505A170	PI505F170	17.0					
PI505A171	PI505F171	17.1					
PI505A172	PI505F172	17.2					
PI505A175	PI505F175	17.5					
PI505A177	PI505F177	17.7					
PI505A178	PI505F178	17.8					
PI505A180	PI505F180	18.0					
PI505A181	PI505F181	18.1	20	77	101	153	
PI505A182	PI505F182	18.2					
PI505A185	PI505F185	18.5					
PI505A190	PI505F190	19.0					
PI505A191	PI505F191	19.1					
PI505A195	PI505F195	19.5					
PI505A197	PI505F197	19.7					
PI505A200	PI505F200	20.0					

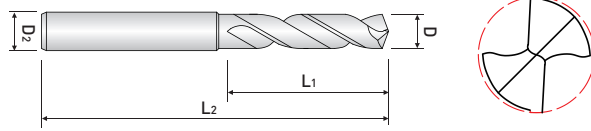
Data • p360

※ 상기 제품은 고객의 주문 시 생산합니다.

■ 허용공차

μm=1/1000mm

공차	외경	μm=1/1000mm				
		1이상 3이하	3초과 6이하	6초과 10이하	10초과 18이하	18초과 30이하
인선부(m7)		+12	+16	+21	+25	+29
		+2	+4	+6	+7	+8
생크부(h6)		0	0	0	0	0
		-6	-8	-9	-11	-13



POWER DRILL – STUB / 3 x D

PDS ...series



EDP. No.	D	L ₁	L ₂	D ₂	STOCK
PDS010	1	8	38	3	•
PDS011	1.1	10	42		•
PDS012	1.2				•
PDS013	1.3				•
PDS014	1.4				•
PDS015	1.5				•
PDS016	1.6				•
PDS017	1.7				•
PDS018	1.8				•
PDS019	1.9				•
PDS 020	2.0			14	50
PDS 021	2.1	•			
PDS 022	2.2	•			
PDS 023	2.3	•			
PDS 024	2.4	•			
PDS 025	2.5	•			
PDS 026	2.6	•			
PDS 027	2.7	•			
PDS 028	2.8	•			
PDS 029	2.9	•			
PDS 030	3.0	18	60	•	
PDS 031	3.1	22	60	4	•
PDS 032	3.2				•
PDS 033	3.3				•
PDS 034	3.4				•
PDS 035	3.5				•
PDS 036	3.6				•
PDS 037	3.7				•
PDS 038	3.8				•
PDS 039	3.9				•
PDS 040	4.0				•
PDS 041	4.1	24	62	5	•
PDS 042	4.2	26			•
PDS 043	4.3				•
PDS 044	4.4				•
PDS 045	4.5				•
PDS 046	4.6				•
PDS 047	4.7				•
PDS 048	4.8				•
PDS 049	4.9				•
PDS 050	5.0				•
PDS 051	5.1		28	66	6

EDP. No.	D	L ₁	L ₂	D ₂	STOCK			
PDS 052	5.2	28	66	6	•			
PDS 053	5.3				•			
PDS 054	5.4				•			
PDS 055	5.5				•			
PDS 056	5.6				•			
PDS 057	5.7	30	74	7	•			
PDS 058	5.8				•			
PDS 059	5.9				•			
PDS 060	6.0				•			
PDS 061	6.1				•			
PDS 062	6.2	34	74	7	•			
PDS 063	6.3				•			
PDS 064	6.4				•			
PDS 065	6.5				•			
PDS 066	6.6				•			
PDS 067	6.7				37	79	8	•
PDS 068	6.8							•
PDS 069	6.9							•
PDS 070	7.0							•
PDS 071	7.1							•
PDS 072	7.2	40	84	9	•			
PDS 073	7.3				•			
PDS 074	7.4				•			
PDS 075	7.5				•			
PDS 076	7.6				•			
PDS 077	7.7				•			
PDS 078	7.8				•			
PDS 079	7.9				•			
PDS 080	8.0				•			
PDS 081	8.1				43	89	10	•
PDS 082	8.2	•						
PDS 083	8.3	•						
PDS 084	8.4	•						
PDS 085	8.5	•						
PDS 086	8.6	•						
PDS 087	8.7	•						
PDS 088	8.8	•						
PDS 089	8.9	•						
PDS 090	9.0	•						
PDS 091	9.1	47	89	10	•			
PDS 092	9.2				•			
PDS 093	9.3				•			

Data • p359

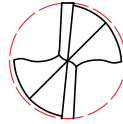
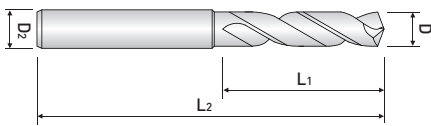
EDP. No.	D	L ₁	L ₂	D ₂	STOCK
PDS 094	9.4	47	89	10	•
PDS 095	9.5				•
PDS 096	9.6				•
PDS 097	9.7				•
PDS 098	9.8				•
PDS 099	9.9				•
PDS 100	10.0				•
PDS 101	10.1	51	95	11	•
PDS 102	10.2				•
PDS 103	10.3				•
PDS 104	10.4				•
PDS 105	10.5				•
PDS 106	10.6				•
PDS 107	10.7				•
PDS 108	10.8				•
PDS 109	10.9				•
PDS 110	11.0				•
PDS 111	11.1	54	102	12	•
PDS 112	11.2				•
PDS 113	11.3				•
PDS 114	11.4				•
PDS 115	11.5				•
PDS 116	11.6				•
PDS 117	11.7				•
PDS 118	11.8				•
PDS 119	11.9				•
PDS 120	12.0				•
PDS 121	12.1	57	102	13	•
PDS 122	12.2				•
PDS 123	12.3				•
PDS 124	12.4				•
PDS 125	12.5				•
PDS 126	12.6				•
PDS 127	12.7				•
PDS 128	12.8				•
PDS 129	12.9				•
PDS 130	13.0				•
PDS 131	13.1	60	107	14	•
PDS 132	13.2				•
PDS 133	13.3				•
PDS 132	13.4				•
PDS 135	13.5				•
PDS 136	13.6				•
PDS 137	13.7				•
PDS 138	13.8				•
PDS 139	13.9				•
PDS 140	14.0				•

EDP. No.	D	L ₁	L ₂	D ₂	STOCK			
PDS 141	14.1	62	111	15	•			
PDS 142	14.2				•			
PDS 143	14.3				•			
PDS 144	14.4				•			
PDS 145	14.5				•			
PDS 146	14.6				•			
PDS 147	14.7				•			
PDS 148	14.8				•			
PDS 149	14.9				•			
PDS 150	15.0				•			
PDS 151	15.1	64	115	16	•			
PDS 152	15.2				•			
PDS 154	15.4				•			
PDS 155	15.5				•			
PDS 156	15.6				•			
PDS 157	15.7				•			
PDS 158	15.8				•			
PDS 159	15.9				•			
PDS 160	16.0				•			
PDS 161	16.1				66	119	17	•
PDS 163	16.3	•						
PDS 164	16.4	•						
PDS 165	16.5	•						
PDS 170	17.0	•						
PDS 171	17.1	66	123	18				•
PDS 172	17.2				•			
PDS 173	17.3				•			
PDS 175	17.5				•			
PDS 177	17.7				•			
PDS 178	17.8				•			
PDS 180	18.0				•			
PDS 181	18.1				70	127	19	•
PDS 182	18.2							•
PDS 185	18.5							•
PDS 190	19.0	•						
PDS 191	19.1	70	131	20	•			
PDS 192	19.2				•			
PDS 195	19.5				•			
PDS 197	19.7				•			
PDS 200	20.0				•			
PDS 220	22.0	75	131	22	•			
PDS 225	22.5	80	131	23	•			
PDS 230	23.0	86	140	23	•			
PDS 235	23.5	86	140	24	•			
PDS 240	24.0				•			

Data • p359

■ 허용공차 μm=1/1000mm

공차	외경	1이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하	18초과 300이하
인선부(h8)		0 -14	0 -18	0 -22	0 -27	0 -33
생크부(h6)		0 -6	0 -8	0 -9	0 -11	0 -13



POWER DRILL – MEDIUM / 5 x D

PDM ...series



EDP. No.	D	L ₁	L ₂	D ₂	STOCK	
PDM 030	3.0	25	60	3	•	
PDM 031	3.1	27			•	
PDM 032	3.2				•	
PDM 033	3.3				•	
PDM 034	3.4		30	65	•	
PDM 035	3.5	•				
PDM 036	3.6	•				
PDM 037	3.7	•				
PDM 038	3.8	33	71	•		
PDM 039	3.9			•		
PDM 040	4.0			•		
PDM 041	4.1			33	71	•
PDM 042	4.2	•				
PDM 043	4.3	36	71			•
PDM 044	4.4					•
PDM 045	4.5			•		
PDM 046	4.6			39	71	•
PDM 047	4.7	•				
PDM 048	4.8	•				
PDM 049	4.9	•				
PDM 050	5.0	39	83	6	•	
PDM 051	5.1				•	
PDM 052	5.2				•	
PDM 053	5.3				43	83
PDM 054	5.4	•				
PDM 055	5.5	•				
PDM 056	5.6	47	87	7		
PDM 057	5.7				•	
PDM 058	5.8				•	
PDM 059	5.9				•	
PDM 060	6.0	47	87	7	•	
PDM 061	6.1				•	
PDM 062	6.2				•	
PDM 063	6.3				68	115
PDM 064	6.4	•				
PDM 065	6.5	•				
PDM 066	6.6	•				

EDP. No.	D	L ₁	L ₂	D ₂	STOCK
PDM 067	6.7	47	87	7	•
PDM 068	6.8				•
PDM 069	6.9				•
PDM 070	7.0				•
PDM 071	7.1	52	92	8	•
PDM 072	7.2				•
PDM 073	7.3				•
PDM 074	7.4				•
PDM 075	7.5	56	96	9	•
PDM 076	7.6				•
PDM 077	7.7				•
PDM 078	7.8				•
PDM 079	7.9	62	105	10	•
PDM 080	8.0				•
PDM 081	8.1				•
PDM 082	8.2				68
PDM 083	8.3	•			
PDM 084	8.4	•			
PDM 085	8.5	68	115	11	
PDM 086	8.6				•
PDM 087	8.7				•
PDM 088	8.8				68
PDM 089	8.9	•			
PDM 090	9.0	•			
PDM 091	9.1	68	115	11	
PDM 092	9.2				•
PDM 093	9.3				•
PDM 094	9.4				68
PDM 095	9.5	•			
PDM 096	9.6	•			
PDM 097	9.7	68	115	11	
PDM 098	9.8				•
PDM 099	9.9				•
PDM 100	10.0				68
PDM 101	10.1	•			
PDM 102	10.2	•			
PDM 103	10.3	•			

Data • p359

EDP. No.	D	L ₁	L ₂	D ₂	STOCK			
PDM 104	10.4	68	115	11	•			
PDM 105	10.5				•			
PDM 106	10.6				•			
PDM 107	10.7				•			
PDM 108	10.8				•			
PDM 109	10.9				•			
PDM 110	11.0				•			
PDM 111	11.1				71	121	12	•
PDM 112	11.2	•						
PDM 113	11.3	•						
PDM 114	11.4	•						
PDM 115	11.5	•						
PDM 116	11.6	•						
PDM 117	11.7	•						
PDM 118	11.8	•						
PDM 119	11.9	•						
PDM 120	12.0	•						
PDM 121	12.1	75	125	13				•
PDM 122	12.2							•
PDM 123	12.3				•			
PDM 124	12.4				•			
PDM 125	12.5				•			
PDM 126	12.6				•			
PDM 127	12.7				•			
PDM 128	12.8				•			
PDM 129	12.9				•			
PDM 130	13.0				•			
PDM 131	13.1				80	134	14	•
PDM 132	13.2							•
PDM 133	13.3	•						
PDM 134	13.4	•						
PDM 135	13.5	•						
PDM 136	13.6	•						
PDM 137	13.7	•						
PDM 138	13.8	•						
PDM 139	13.9	•						
PDM 140	14.0	•						

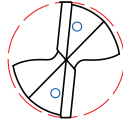
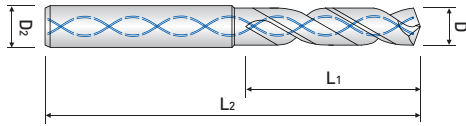
EDP. No.	D	L ₁	L ₂	D ₂	STOCK			
PDM 141	14.1	83	143	15	•			
PDM 142	14.2				•			
PDM 143	14.3				•			
PDM 144	14.4				•			
PDM 145	14.5				•			
PDM 146	14.6				•			
PDM 147	14.7				•			
PDM 148	14.8				•			
PDM 149	14.9				•			
PDM 150	15.0				•			
PDM 151	15.1	90	152	16	•			
PDM 152	15.2				•			
PDM 154	15.4				•			
PDM 155	15.5				•			
PDM 156	15.6				•			
PDM 157	15.7				•			
PDM 158	15.8				•			
PDM 160	16.0				•			
PDM 161	16.1				95	155	17	•
PDM 163	16.3							•
PDM 165	16.5	•						
PDM 170	17.0	•						
PDM 171	17.1	100	157	18				•
PDM 172	17.2				•			
PDM 175	17.5				•			
PDM 177	17.7				•			
PDM 178	17.8				•			
PDM 180	18.0				•			
PDM 181	18.1				105	160	19	•
PDM 182	18.2							•
PDM 185	18.5	•						
PDM 190	19.0	•						
PDM 191	19.1	110	163	20	•			
PDM 195	19.5				•			
PDM 197	19.7				•			
PDM 200	20.0				•			

Data • p359

■ 허용공차 μm=1/1000mm

공차 \ 외경	1이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하	18초과 300이하
인선부(h8)	0 -14	0 -18	0 -22	0 -27	0 -33
생크부(h6)	0 -6	0 -8	0 -9	0 -11	0 -13

Power Drill



3 x D / 내부급유형
POWER DRILL - STUB /
INTERNAL COOLANT

PDSI ...series



EDP. No.	D	L1	L2	D2	STOCK
PDSI 030	3.0	25	60	3	•
PDSI 031	3.1	20		4	•
PDSI 032	3.2				
PDSI 033	3.3				
PDSI 034	3.4	24	62		
PDSI 035	3.5				
PDSI 036	3.6	26			
PDSI 037	3.7				
PDSI 038	3.8	28	66	6	•
PDSI 039	3.9				
PDSI 040	4.0	30			
PDSI 041	4.1				
PDSI 042	4.2	34	74	7	•
PDSI 043	4.3				
PDSI 044	4.4	34			
PDSI 045	4.5				
PDSI 046	4.6	28	66	6	•
PDSI 047	4.7				
PDSI 048	4.8	30			
PDSI 049	4.9				
PDSI 050	5.0	34	74	7	•
PDSI 051	5.1				
PDSI 052	5.2	34			
PDSI 053	5.3				
PDSI 054	5.4	30	66	6	•
PDSI 055	5.5				
PDSI 056	5.6	28			
PDSI 057	5.7				
PDSI 058	5.8	34	74	7	•
PDSI 059	5.9				
PDSI 060	6.0	34			
PDSI 061	6.1				
PDSI 062	6.2	34	74	7	•
PDSI 063	6.3				
PDSI 064	6.4	34			
PDSI 065	6.5				
PDSI 066	6.6	34			

EDP. No.	D	L1	L2	D2	STOCK
PDSI 067	6.7	37	74	7	•
PDSI 068	6.8				
PDSI 069	6.9				
PDSI 070	7.0				
PDSI 071	7.1	40	79	8	•
PDSI 072	7.2				
PDSI 073	7.3				
PDSI 074	7.4				
PDSI 075	7.5	43	84	9	•
PDSI 076	7.6				
PDSI 077	7.7				
PDSI 078	7.8				
PDSI 079	7.9	47	89	10	•
PDSI 080	8.0				
PDSI 081	8.1				
PDSI 082	8.2				
PDSI 083	8.3	51	95	11	•
PDSI 084	8.4				
PDSI 085	8.5				
PDSI 086	8.6				
PDSI 087	8.7	51	95	11	•
PDSI 088	8.8				
PDSI 089	8.9				
PDSI 090	9.0				
PDSI 091	9.1	51	95	11	•
PDSI 092	9.2				
PDSI 093	9.3				
PDSI 094	9.4				
PDSI 095	9.5	51	95	11	•
PDSI 096	9.6				
PDSI 097	9.7				
PDSI 098	9.8				
PDSI 099	9.9	51	95	11	•
PDSI 100	10.0				
PDSI 101	10.1				
PDSI 102	10.2				
PDSI 103	10.3	51	95	11	•

Data • p359

EDP. No.	D	L ₁	L ₂	D ₂	STOCK			
PDSI 104	10.4	51	95	11	•			
PDSI 105	10.5				•			
PDSI 106	10.6				•			
PDSI 107	10.7				•			
PDSI 108	10.8				•			
PDSI 109	10.9				•			
PDSI 110	11.0				•			
PDSI 111	11.1				54	102	12	•
PDSI 112	11.2	•						
PDSI 113	11.3	•						
PDSI 114	11.4	•						
PDSI 115	11.5	•						
PDSI 116	11.6	•						
PDSI 117	11.7	•						
PDSI 118	11.8	•						
PDSI 119	11.9	•						
PDSI 120	12.0	•						
PDSI 121	12.1	57	102	13				•
PDSI 122	12.2							•
PDSI 123	12.3				•			
PDSI 124	12.4				•			
PDSI 125	12.5				•			
PDSI 126	12.6				•			
PDSI 127	12.7				•			
PDSI 128	12.8				•			
PDSI 129	12.9				•			
PDSI 130	13.0				•			
PDSI 131	13.1				60	107	14	•
PDSI 132	13.2							•
PDSI 133	13.3	•						
PDSI 134	13.4	•						
PDSI 135	13.5	•						
PDSI 136	13.6	•						
PDSI 137	13.7	•						
PDSI 138	13.8	•						
PDSI 139	13.9	•						
PDSI 140	14.0	•						

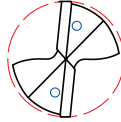
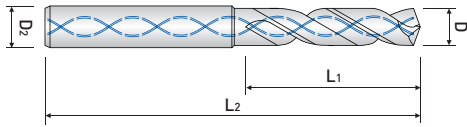
EDP. No.	D	L ₁	L ₂	D ₂	STOCK			
PDSI 141	14.1	62	111	15	•			
PDSI 142	14.2				•			
PDSI 143	14.3				•			
PDSI 144	14.4				•			
PDSI 145	14.5				•			
PDSI 146	14.6				•			
PDSI 147	14.7				•			
PDSI 148	14.8				•			
PDSI 149	14.9				•			
PDSI 150	15.0				•			
PDSI 151	15.1	64	115	16	•			
PDSI 152	15.2				•			
PDSI 154	15.4				•			
PDSI 155	15.5				•			
PDSI 156	15.6				•			
PDSI 157	15.7				•			
PDSI 158	15.8				•			
PDSI 160	16.0				•			
PDSI 161	16.1				66	119	17	•
PDSI 163	16.3							•
PDSI 165	16.5	•						
PDSI 170	17.0	•						
PDSI 171	17.1	66	123	18				•
PDSI 172	17.2				•			
PDSI 175	17.5				•			
PDSI 177	17.7				•			
PDSI 178	17.8				•			
PDSI 180	18.0				•			
PDSI 181	18.1				70	127	19	•
PDSI 182	18.2							•
PDSI 185	18.5	•						
PDSI 190	19.0	•						
PDSI 191	19.1	70	131	20	•			
PDSI 195	19.5				•			
PDSI 197	19.7				•			
PDSI 200	20.0				•			

Data • p359

■ 허용공차 μm=1/1000mm

공차 \ 외경	1이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하	18초과 300이하
인선부(h8)	0 -14	0 -18	0 -22	0 -27	0 -33
생크부(h6)	0 -6	0 -8	0 -9	0 -11	0 -13

Power Drill



5 x D / 내부급유형
POWER DRILL - MEDIUM /
INTERNAL COOLANT

PDMI ...series



EDP. No.	D	L ₁	L ₂	D ₂	STOCK			
PDMI 031	3.1	27	74	4	•			
PDMI 032	3.2				•			
PDMI 033	3.3				•			
PDMI 034	3.4				•			
PDMI 035	3.5				•			
PDMI 036	3.6				•			
PDMI 037	3.7	33			•			
PDMI 038	3.8				•			
PDMI 039	3.9				•			
PDMI 040	4.0				•			
PDMI 041	4.1	33			•			
PDMI 042	4.2				•			
PDMI 043	4.3	36	80	5	•			
PDMI 044	4.4				•			
PDMI 045	4.5				•			
PDMI 046	4.6				•			
PDMI 047	4.7				•			
PDMI 048	4.8				•			
PDMI 049	4.9				39			•
PDMI 050	5.0							•
PDMI 051	5.1	39			•			
PDMI 052	5.2				•			
PDMI 053	5.3	43	87	6	•			
PDMI 054	5.4				•			
PDMI 055	5.5				•			
PDMI 056	5.6				•			
PDMI 057	5.7				•			
PDMI 058	5.8				•			
PDMI 059	5.9				•			
PDMI 060	6.0				•			
PDMI 061	6.1				47	95	7	•
PDMI 062	6.2							•
PDMI 063	6.3	•						
PDMI 064	6.4	•						
PDMI 065	6.5	•						
PDMI 066	6.6	•						
PDMI 067	6.7	•						

EDP. No.	D	L ₁	L ₂	D ₂	STOCK
PDMI 068	6.8	47	95	7	•
PDMI 069	6.9				•
PDMI 070	7.0				•
PDMI 071	7.1	52	103	8	•
PDMI 072	7.2				•
PDMI 073	7.3				•
PDMI 074	7.4				•
PDMI 075	7.5				•
PDMI 076	7.6				•
PDMI 077	7.7				•
PDMI 078	7.8				•
PDMI 079	7.9				•
PDMI 080	8.0				•
PDMI 081	8.1	56	105	9	•
PDMI 082	8.2				•
PDMI 083	8.3				•
PDMI 084	8.4				•
PDMI 085	8.5				•
PDMI 086	8.6				•
PDMI 087	8.7				•
PDMI 088	8.8				•
PDMI 089	8.9				•
PDMI 090	9.0				•
PDMI 091	9.1	62	108	10	•
PDMI 092	9.2				•
PDMI 093	9.3				•
PDMI 094	9.4				•
PDMI 095	9.5				•
PDMI 096	9.6				•
PDMI 097	9.7				•
PDMI 098	9.8				•
PDMI 099	9.9				•
PDMI 100	10.0				•
PDMI 101	10.1	68	125	11	•
PDMI 102	10.2				•
PDMI 103	10.3				•
PDMI 104	10.4				•

Data • p359

EDP. No.	D	L ₁	L ₂	D ₂	STOCK
PDMI 105	10.5	68	125	11	•
PDMI 106	10.6				•
PDMI 107	10.7				•
PDMI 108	10.8				•
PDMI 109	10.9				•
PDMI 110	11.0				•
PDMI 111	11.1	71	133	12	•
PDMI 112	11.2				•
PDMI 113	11.3				•
PDMI 114	11.4				•
PDMI 115	11.5				•
PDMI 116	11.6				•
PDMI 117	11.7				•
PDMI 118	11.8				•
PDMI 119	11.9				•
PDMI 120	12.0				•
PDMI 121	12.1	75	137	13	•
PDMI 122	12.2				•
PDMI 123	12.3				•
PDMI 124	12.4				•
PDMI 125	12.5				•
PDMI 126	12.6				•
PDMI 127	12.7				•
PDMI 128	12.8				•
PDMI 129	12.9				•
PDMI 130	13.0				•
PDMI 131	13.1	80	142	14	•
PDMI 132	13.2				•
PDMI 133	13.3				•
PDMI 134	13.4				•
PDMI 135	13.5				•
PDMI 136	13.6				•
PDMI 137	13.7				•
PDMI 138	13.8				•
PDMI 139	13.9				•
PDMI 140	14.0				•

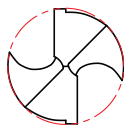
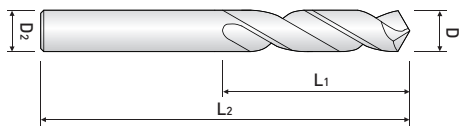
EDP. No.	D	L ₁	L ₂	D ₂	STOCK			
PDMI 141	14.1	83	148	15	•			
PDMI 142	14.2				•			
PDMI 143	14.3				•			
PDMI 144	14.4				•			
PDMI 145	14.5				•			
PDMI 146	14.6				•			
PDMI 147	14.7				•			
PDMI 148	14.8				•			
PDMI 149	14.9				•			
PDMI 150	15.0				•			
PDMI 151	15.1	90	152	16	•			
PDMI 152	15.2				•			
PDMI 154	15.4				•			
PDMI 155	15.5				•			
PDMI 156	15.6				•			
PDMI 157	15.7				•			
PDMI 158	15.8				•			
PDMI 160	16.0				•			
PDMI 161	16.1				95	155	17	•
PDMI 163	16.3							•
PDMI 165	16.5	•						
PDMI 170	17.0	•						
PDMI 171	17.1	100	157	18				•
PDMI 172	17.2				•			
PDMI 175	17.5				•			
PDMI 177	17.7				•			
PDMI 178	17.8				•			
PDMI 180	18.0				•			
PDMI 181	18.1				105	160	19	•
PDMI 182	18.2							•
PDMI 185	18.5							•
PDMI 190	19.0							•
PDMI 191	19.1	110	163	20	•			
PDMI 195	19.5				•			
PDMI 197	19.7				•			
PDMI 200	20.0				•			

Data • p359

■ 허용공차 μm = 1/1000mm

공차 \ 외경	1이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하	18초과 300이하
인선부(h8)	0 -14	0 -18	0 -22	0 -27	0 -33
생크부(h6)	0 -6	0 -8	0 -9	0 -11	0 -13

Solid Spiral Drill



표준 길이

SOLID SPIRAL DRILL

- 비철금속 및 알루미늄 가공에 적합

SSD ...series

D2추가 유무 확인!!
각도확인



EDP. No.	D	L ₁	L ₂	STOCK
SSD010	1.0	10	38	•
SSD011	1.1			•
SSD012	1.2			•
SSD013	1.3			•
SSD014	1.4			•
SSD015	1.5	13	38	•
SSD016	1.6			•
SSD017	1.7			•
SSD018	1.8			•
SSD019	1.9			•
SSD020	2.0	16	45	•
SSD021	2.1			•
SSD022	2.2			•
SSD023	2.3			•
SSD024	2.4			•
SSD025	2.5	20	50	•
SSD026	2.6			•
SSD027	2.7	22	50	•
SSD028	2.8			•
SSD029	2.9			•
SSD030	3.0			•
SSD031	3.1	25	50	•
SSD032	3.2			•
SSD033	3.3			•
SSD034	3.4			•
SSD035	3.5			•

EDP. No.	D	L ₁	L ₂	STOCK
SSD036	3.6	28	55	•
SSD037	3.7			•
SSD038	3.8			•
SSD039	3.9			•
SSD040	4.0			•
SSD041	4.1	30	60	•
SSD042	4.2			•
SSD043	4.3			•
SSD044	4.4			•
SSD045	4.5			•
SSD046	4.6	33	65	•
SSD047	4.7			•
SSD048	4.8	35	65	•
SSD049	4.9			•
SSD050	5.0			•
SSD051	5.1			•
SSD052	5.2			•
SSD053	5.3			•
SSD054	5.4			•
SSD055	5.5	•		
SSD056	5.6	38	75	•
SSD057	5.7			•
SSD058	5.8			•
SSD059	5.9			•
SSD060	6.0			•

Data • p359

EDP. No.	D	L ₁	L ₂	STOCK
SSD061	6.1	38	75	•
SSD062	6.2			•
SSD063	6.3			•
SSD064	6.4			•
SSD065	6.5			•
SSD066	6.6	45	80	•
SSD067	6.7			•
SSD068	6.8			•
SSD069	6.9			•
SSD070	7.0			•
SSD071	7.1			•
SSD072	7.2			•
SSD073	7.3			•
SSD074	7.4			•
SSD075	7.5			•
SSD076	7.6	50	85	•
SSD077	7.7			•
SSD078	7.8			•
SSD079	7.9			•
SSD080	8.0			•
SSD081	8.1			•
SSD082	8.2			•
SSD083	8.3			•
SSD084	8.4			•
SSD085	8.5			•
SSD086	8.6	50	95	•
SSD087	8.7			•
SSD088	8.8			•
SSD089	8.9			•
SSD090	9.0			•

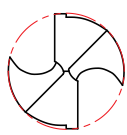
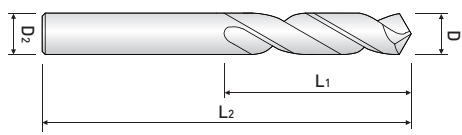
EDP. No.	D	L ₁	L ₂	STOCK
SSD091	9.1	50	95	•
SSD092	9.2			•
SSD093	9.3			•
SSD094	9.4			•
SSD095	9.5			•
SSD096	9.6			•
SSD097	9.7			•
SSD098	9.8			•
SSD099	9.9	55	100	•
SSD100	10.0			•
SSD101	10.1	55	115	•
SSD102	10.2			•
SSD103	10.3			•
SSD104	10.4			•
SSD105	10.5			•
SSD106	10.6	60	115	•
SSD107	10.7			•
SSD108	10.8			•
SSD109	10.9			•
SSD110	11.0			•
SSD111	11.1	65	120	•
SSD112	11.2			•
SSD113	11.3			•
SSD115	11.5			•
SSD118	11.8			•
SSD119	11.9			•
SSD120	12.0			•
SSD124	12.4			70
SSD125	12.5	•		
SSD130	13.0	75	130	•

Data • p359

■ 허용공차 μm=1/1000mm

공차	외경	μm=1/1000mm			
		1이상 3이하	3초과 6이하	6초과 10이하	10초과 18이하
인선부(h8)	0	0	0	0	0
	-14	-18	-22	-27	
생크부(h6)	0	0	0	0	
	-10	-12	-15	-18	

Solid Spiral Drill

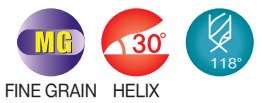


롱 타입
SOLID SPIRAL DRILL - LONG

-비철금속 및 알루미늄 가공에 적합

SSDL ...series

D2추가 유부 확인!!
각도확인



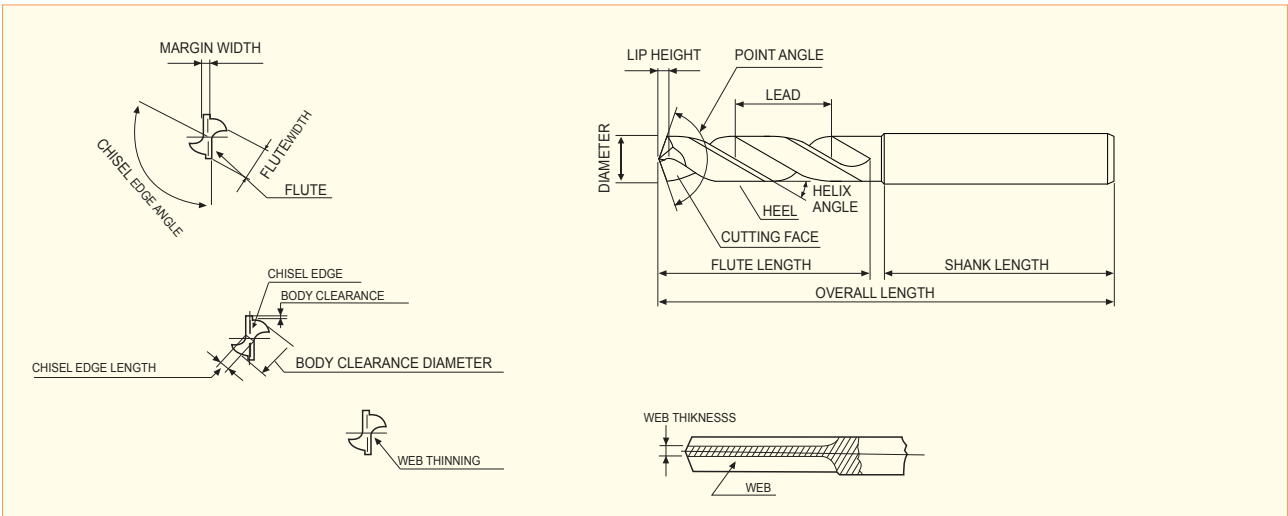
EDP. No.	D	L1	L2	STOCK
SSDL030	3.0	42	73	•
SSDL031	3.1			•
SSDL032	3.2			•
SSDL033	3.3			•
SSDL034	3.4			•
SSDL035	3.5			•
SSDL036	3.6	45	80	•
SSDL037	3.7			•
SSDL038	3.8			•
SSDL039	3.9	50	80	•
SSDL040	4.0	54	85	•
SSDL041	4.1			•
SSDL042	4.2			•
SSDL043	4.3			•
SSDL044	4.4			•
SSDL045	4.5			•
SSDL046	4.6	59	90	•
SSDL047	4.7			•
SSDL048	4.8			•
SSDL049	4.9			•
SSDL050	5.0			•
SSDL051	5.1	63	95	•
SSDL052	5.2			•
SSDL053	5.3			•
SSDL054	5.4			•
SSDL055	5.5			•
SSDL056	5.6	66	100	•
SSDL057	5.7			•
SSDL058	5.8			•
SSDL059	5.9			•
SSDL060	6.0	70	105	•
SSDL061	6.1			•
SSDL062	6.2			•
SSDL063	6.3			•
SSDL064	6.4			•
SSDL065	6.5	•		

EDP. No.	D	L1	L2	STOCK
SSDL066	6.6	73	105	•
SSDL067	6.7			•
SSDL068	6.8			•
SSDL069	6.9			•
SSDL070	7.0			•
SSDL071	7.1	76	110	•
SSDL072	7.2			•
SSDL073	7.3			•
SSDL074	7.4			•
SSDL075	7.5			•
SSDL076	7.6	80	115	•
SSDL077	7.7			•
SSDL078	7.8			•
SSDL079	7.9			•
SSDL080	8.0			•
SSDL081	8.1	85	125	•
SSDL082	8.2			•
SSDL083	8.3			•
SSDL084	8.4			•
SSDL085	8.5			•
SSDL086	8.6			•
SSDL087	8.7			•
SSDL088	8.8			•
SSDL089	8.9			•
SSDL090	9.0	•		
SSDL091	9.1	88	130	•
SSDL092	9.2			•
SSDL093	9.3			•
SSDL094	9.4			•
SSDL095	9.5			•
SSDL096	9.6	90	130	•
SSDL097	9.7			•
SSDL098	9.8			•
SSDL099	9.9			•
SSDL100	10.0			•

■ 허용공차 mm = 1/1000mm

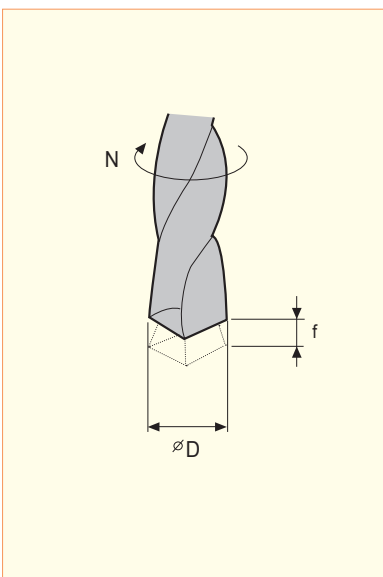
공차	외경	10이상 30이하	3초과 60이하	6초과 100이하	10초과 180이하
인선부(h8)		0 -14	0 -18	0 -22	0 -27
생크부(h6)		0 -10	0 -12	0 -15	0 -18

□ Nomenclature of Drill



□ Working of Main Angle

POINT ANGLE	HELIX ANGLE	LIP RELIEF ANGLE
70. 118. 140.	10. 38. 40.	7. 10. 12. 15.
<p>Large → Torque → Small</p> <p>Small → Thrust → Large</p>	<p>Bad → Cutting Capacity → Good</p> <p>Good → Chip Ejection → Bad</p> <p>Large → Rigidity of tool → Small</p>	<p>Small → Tool Wear → Large</p> <p>Small → Vibration → Large</p>



●Cutting Speed

$$V = \frac{\pi \times D \times N}{1000} \text{ (m/min)}$$

- V : cutting Speed (m/min)
- D : Diameter of drill (mm)
- N : revolution (rpm)
- π : (3.14)

●Feed

$$f = \frac{S}{N} \text{ (m/rev)}$$

- f : feed (mm/rev)
- S : depth of cut per min (mm/min)
- N : revolution(rpm) (rpm)

●Helix Angle

$$\delta = \tan^{-1} \left(\frac{\pi D}{L} \right)$$

- δ : helix angle
- D : Diameter of drill (mm)
- L : lead (mm)
- π : (3.14)

□ SSD, SSDL series

피삭재 DIAMETER (mm)	공구강, 합금강		알루미늄, 알루미늄 합금		황동, 청동		엑포시, 레진	
	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)
3	4000~7000	0.02	10000~12000	0.03	7000~10000	0.02	9000~12000	0.08
5	2400~4200	0.03	6000~8000	0.05	4200~6000	0.04	5400~7200	0.08
8	1500~2600	0.05	3700~5000	0.08	2600~3700	0.08	3400~4500	0.09
12	1000~1700	0.06	2500~3200	0.12	1700~2500	0.12	2200~3000	0.11

□ PDS, PDM series ▶ 파워드릴

V : m/min, f : mm/rev

TYPE	Dia.	COD	연강 합금강, 탄소강		합금강 단조강		열처리강		스테인레스강		덕타일		주철	
			V	f	V	f	V	f	V	f	V	f	V	f
SOLID TYPE	ø3-5	PDS030-050	40~70	0.15-0.25	35~55	0.10-0.20	15~25	0.05-0.15	15~25	0.05-0.15	35~70	0.15-0.25	45~75	0.15-0.30
	ø5-8	PDS051-080	50~75	0.20-0.30	45~60	0.15-0.25	15~30	0.10-0.20	15~30	0.10-0.20	45~75	0.20-0.35	55~85	0.20-0.40
	ø8-10	PDS081-100	50~75	0.25-0.35	45~60	0.15-0.30	20~35	0.10-0.20	15~30	0.10-0.20	45~75	0.25-0.40	55~85	0.20-0.40
	ø10-12	PDS101-120	50~75	0.25-0.35	45~60	0.15-0.30	20~35	0.10-0.25	15~30	0.10-0.25	45~75	0.25-0.40	55~85	0.20-0.45
	ø12-14	PDS121-140	55~80	0.25-0.40	50~70	0.20-0.35	20~35	0.10-0.25	15~30	0.10-0.25	50~80	0.25-0.45	60~90	0.25-0.50
	ø14-20	PDS141-200	55~80	0.30-0.45	50~70	0.20-0.35	20~35	0.10-0.30	15~30	0.10-0.25	50~80	0.25-0.50	60~100	0.25-0.55

□ PDSI, PDMI series ▶ 오일 홀 파워 드릴

V : m/min, f : mm/rev

피삭재	연강 합금강, 탄소강		합금강 단조강		열처리강		스테인레스강		덕타일		주철	
	V	f	V	f	V	f	V	f	V	f	V	f
Dia.	V	f	V	f	V	f	V	f	V	f	V	f
7~8	80~110	0.15-0.25	70~100	0.15-0.25	50~80	0.10-0.20	30~60	0.10-0.20	50~80	0.15-0.25	80~120	0.15-0.30
8~10	90~120	0.20-0.30	80~110	0.15-0.30	60~90	0.15-0.25	30~70	0.10-0.20	60~90	0.20-0.30	100~130	0.25-0.35
10~12	100~130	0.25-0.35	90~120	0.20-0.30	70~100	0.20-0.30	30~70	0.10-0.20	70~100	0.25-0.35	110~140	0.25-0.35
12~16	110~140	0.25-0.35	100~130	0.25-0.35	80~100	0.20-0.30	40~70	0.15-0.25	80~110	0.30-0.40	120~150	0.30-0.40
16~20	120~150	0.25-0.40	110~140	0.25-0.35	90~110	0.20-0.30	40~70	0.15-0.30	90~120	0.30-0.40	130~160	0.30-0.40

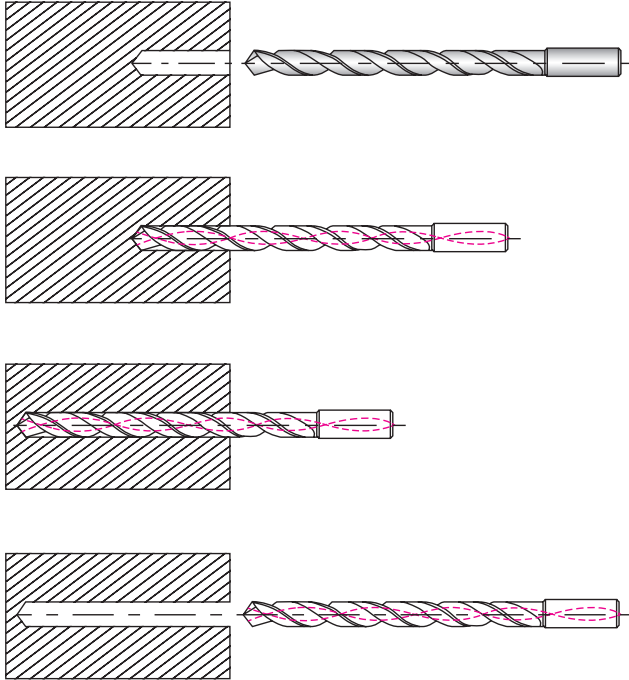
PF50, P50 series

파삭재	탄소강(C<0.3%) 합금강/SS400 SCM ~710N/mm ²		탄소강(C≥0.3%) 합금강 / S50C SCM ~1.060N/mm ²		SUJ2-SUS440		SKD61 34~43 HRC		43~48 HRC		SKD11 48~53 HRC		주철 FC 250~350		덕타일 FC 400~500	
V	80~125m/min		80~125m/min		63~80m/min		40~63m/min		32~45m/min		25~36m/min		80~125m/min		63~90m/min	
DIAMETER (mm)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)
2	12,000	0.06-0.08	12,000	0.06-0.08	11,000	0.06-0.08	8,000	0.06-0.08	6,000	0.05-0.07	4,500	0.03-0.06	15,000	0.06-0.08	11,000	0.06-0.08
3	9,600	0.09-0.12	9,600	0.09-0.12	7,500	0.09-0.12	5,300	0.09-0.12	4,000	0.07-0.11	3,200	0.05-0.09	10,000	0.09-0.12	7,600	0.09-0.12
4	8,000	0.10-0.15	8,000	0.10-0.15	5,650	0.10-0.15	4,000	0.10-0.15	3,000	0.08-0.13	2,600	0.06-0.10	8,000	0.10-0.15	6,000	0.10-0.15
5	6,400	0.12-0.18	6,400	0.12-0.18	4,550	0.12-0.18	3,300	0.12-0.18	2,400	0.10-0.15	2,000	0.8-0.12	6,400	0.12-0.18	4,800	0.12-0.18
6	5,300	0.14-0.20	5,300	0.14-0.20	3,800	0.14-0.20	2,750	0.14-0.20	2,000	0.12-0.18	1,700	0.09-0.15	5,300	0.14-0.20	4,000	0.14-0.20
8	4,000	0.16-0.24	4,000	0.16-0.24	2,850	0.16-0.24	2,100	0.16-0.24	1,500	0.14-0.22	1,300	0.12-0.20	4,000	0.16-0.24	3,000	0.16-0.24
10	3,200	0.18-0.27	3,200	0.18-0.27	2,250	0.18-0.27	1,700	0.18-0.27	1,200	0.15-0.25	1,000	0.13-0.23	3,200	0.18-0.27	2,400	0.18-0.27
12	2,650	0.20-0.30	2,650	0.20-0.30	1,900	0.20-0.30	1,400	0.20-0.30	1,000	0.17-0.26	850	0.14-0.24	2,700	0.20-0.30	2,000	0.20-0.30
14	2,300	0.22-0.35	2,300	0.22-0.35	1,600	0.22-0.35	1,200	0.22-0.35	860	0.18-0.30	730	0.15-0.26	2,300	0.22-0.35	1,700	0.22-0.35
16	2,000	0.25-0.36	2,000	0.25-0.36	1,400	0.25-0.36	1,050	0.25-0.36	760	0.20-0.32	640	0.16-0.26	2,000	0.25-0.36	1,500	0.25-0.36
18	1,800	0.28-0.38	1,800	0.28-0.38	1,250	0.28-0.38	920	0.28-0.38	670	0.23-0.33	570	0.18-0.28	1,800	0.28-0.38	1,350	0.28-0.38
20	1,600	0.30-0.40	1,600	0.30-0.40	1,150	0.30-0.40	850	0.30-0.40	600	0.25-0.35	500	0.20-0.30	1,600	0.30-0.40	1,200	0.30-0.40

SF50, PI50 series

파삭재	탄소강(C<0.3%) 합금강/SS400 SCM ~710N/mm ²		탄소강(C≥0.3%) 합금강 / S50C SCM ~1.060N/mm ²		SUJ2-SUS440		SKD61 34~43 HRC		43~48 HRC		SKD11 48~53 HRC		주철 FC 250~350		덕타일 FC 400~500	
V	80~150m/min		80~150m/min		63~100m/min		40~70m/min		32~50m/min		25~40m/min		80~150m/min		63~100m/min	
DIAMETER (mm)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)	RPM (mm ⁻¹)	FEED (mm/rev)
3	12,000	0.09-0.12	13,000	0.09-0.12	7,600	0.09-0.12	6,400	0.09-0.12	5,300	0.07-0.11	3,800	0.05-0.09	12,000	0.09-0.12	8,500	0.09-0.12
4	9,500	0.10-0.15	10,000	0.10-0.15	5,700	0.10-0.15	4,800	0.10-0.15	4,000	0.08-0.13	2,950	0.06-0.10	9,000	0.10-0.15	6,350	0.10-0.15
5	7,600	0.12-0.18	8,000	0.12-0.18	4,600	0.12-0.18	3,800	0.12-0.18	3,200	0.10-0.15	2,300	0.8-0.12	7,600	0.12-0.18	5,100	0.12-0.18
6	6,400	0.14-0.20	6,600	0.14-0.20	3,800	0.14-0.20	3,200	0.14-0.20	2,650	0.12-0.18	1,900	0.09-0.15	6,400	0.14-0.20	4,250	0.14-0.20
8	4,800	0.16-0.24	5,000	0.16-0.24	2,900	0.16-0.24	2,400	0.16-0.24	2,000	0.14-0.22	1,450	0.12-0.20	4,800	0.16-0.24	3,200	0.16-0.24
10	3,800	0.18-0.27	4,000	0.18-0.27	2,300	0.18-0.27	1,900	0.18-0.27	1,600	0.15-0.25	1,150	0.13-0.23	3,800	0.18-0.27	2,550	0.18-0.27
12	3,200	0.20-0.30	3,300	0.20-0.30	1,900	0.20-0.30	1,600	0.20-0.30	1,300	0.17-0.26	950	0.14-0.24	3,200	0.20-0.30	2,100	0.20-0.30
14	2,700	0.22-0.35	2,800	0.22-0.35	1,600	0.22-0.35	1,350	0.22-0.35	1,150	0.18-0.30	800	0.15-0.26	2,700	0.22-0.35	1,800	0.22-0.35
16	2,400	0.25-0.36	2,500	0.25-0.36	1,400	0.25-0.36	1,200	0.25-0.36	1,000	0.20-0.32	700	0.16-0.26	2,400	0.25-0.36	1,600	0.25-0.36
18	2,100	0.28-0.38	2,200	0.28-0.38	1,300	0.28-0.38	1,100	0.28-0.38	900	0.23-0.33	650	0.18-0.28	2,100	0.28-0.38	1,400	0.28-0.38
20	1,900	0.30-0.40	2,000	0.30-0.40	1,150	0.30-0.40	1,000	0.30-0.40	800	0.25-0.35	600	0.20-0.30	1,900	0.30-0.40	1,250	0.30-0.40

□ SF510, SF520 series



1. Guide Drilling은 OD+0.1로 하고, 3×D~5×D로 합니다.
2. Main Drilling시 Guide Drilling 구간에서는 저회전 진입하도록 합니다.(RPM 300, FEED 400mm/min)
3. Guide Drilling 구간이 끝나기 직전 Feed를 멈추고, RPM 증가시킵니다. (조건표 참조)
4. Step없이 Feed를 증가시켜서 Main Drilling 합니다.
5. Main Drilling 완료 후 Tool이 빠질 때, Guide Drilling 시작점 부터는 RPM 300으로 줄이고, Feed는 1000 mm/min으로.
6. Guide Drilling 구간에서 완전히 바깥으로 빠질 때는 Feed를 50%로 감소토록 합니다.

피삭재	CARBON STEELS ALLOY STEEL ~1060 N/mm ²		CAST IRON 250~350 N/mm ²		DUCTILE CAST IRON 400~500 N/mm ²	
	63~125 m/min		63~125 m/min		60~80 m/min	
Drilling Speed	Speed (min ⁻¹)	Feed Rate (mm/rev)	Speed (min ⁻¹)	Feed Rate (mm/rev)	Speed (min ⁻¹)	Feed Rate (mm/rev)
3	7500	0.06 ~ 0.12	7500	0.06 ~ 0.12	7500	0.06 ~ 0.12
4	6400	0.08 ~ 0.16	6400	0.08 ~ 0.16	5600	0.08 ~ 0.16
5	5800	0.10 ~ 0.20	5800	0.10 ~ 0.20	4500	0.10 ~ 0.20
6	4800	0.12 ~ 0.24	4800	0.12 ~ 0.24	3800	0.12 ~ 0.24
8	3600	0.16 ~ 0.28	3600	0.16 ~ 0.28	2800	0.16 ~ 0.28
10	2900	0.20 ~ 0.35	2900	0.20 ~ 0.35	2300	0.20 ~ 0.35
12	2900	0.24 ~ 0.42	2400	0.24 ~ 0.42	1900	0.24 ~ 0.42
14	2050	0.28 ~ 0.46	2050	0.28 ~ 0.46	1600	0.28 ~ 0.46

N = 회전수 (R.P.M)
S = 이송량 (mm/rev)

□ 드릴 사용상 문제점과 대책

문제점 및 현상	원 인	대 책
드릴이 피삭재에 들어가지 않음	Lip Relief가 충분하지 않다. Web가 두껍다.	Lip Relief를 알맞게 재연삭 한다. Web를 가늘게 한다.
마진부위의 칩핑	지그 부싱이 크다.	드릴 치수에 맞는 부싱을 사용한다.
절삭날의 균형	드릴 작업시 과열된다.	이송 속도를 줄이고, 절삭유를 충분히 공급한다.
절삭날의 칩핑	여유각이 크다. 이송 속도가 크다.	Lip Relief를 조절한다. 이송 속도를 낮춘다.
탱의 파손	테이퍼 자루와 소켓 사이의 불안정한 접합	소켓의 이물질 제거 및 마모시 새 것으로 교환한다.
항동 작업시 드릴의 파손	드릴 형태의 부적절한 선택 홈부위에 칩이 막힌다.	재질이 알맞는 드릴을 선정한다.
드릴 중심부의 균열	날 여유가 너무 작다. 과대한 이송	알맞는 여유각으로 재연삭한다. 이송 속도를 낮춘다.
구멍의 치수가 커짐	날끝각과 절삭날의 길이가 틀린다. 주축이 헐겁다.	양질의 드릴을 선택한다. 주축을 알맞게 조인다.
외주 모서리의 파손	과대한 절삭속도 피삭재의 단단한 이물질 드릴선단에 절삭유 공급부족 드릴의 마모	피삭재에 알맞는 선단부를 연마한다. 이송 속도를 낮춘다. 조기에 재연삭한다.
칩 크기가 일정하지 않음	날끝이 부적당하게 연마되었거나 한쪽날에서만 절삭을 행한다.	정확한 재연삭이 필요하다. 양질의 드릴 선정이 필요하다.
구멍이 거침	날끝부가 무디거나 부적합하게 연마되었다. 드릴 선단에 절삭유가 공급되지 않는다. 과대한 이송 고정구가 견고하지 않다.	날끝각을 재연삭한다. 알맞는 절삭유를 선택하여 충분히 공급한다. 이송 속도를 낮춘다. 고정구를 견고하게 고정한다.

