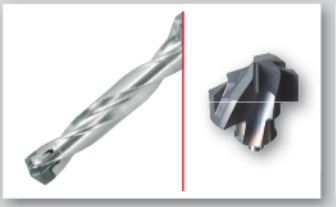
Head changeable drill

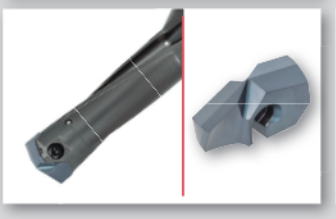


DRILLMEISTER

Head changeable drill series

ø6 mm - ø25.9 mm / L/D = 1.5, 3, 5, 8, 12
※ L/D = 12 : ø8 ~ ø22.9

J010 - J027



DRILLFORCE MEISTER

Two cutting edges functioned for productivity in large diameter drilling

ø26 mm - ø41 mm / L/D = 3, 5

J028 - J032

Solid Drill

SOLIDDRILL

High performance solid carbide drill

J033 - J053

DSW

ø3 mm - ø12 mm / L/D = 3, 5, 8

J034 - J040

DSX

ø3 mm - ø10 mm / L/D = 3, 5, 8

J041 - J044

DSE

ø3 mm - ø10 mm / L/D = 2, 3

J045 - J047

DSM / DSM-CP

ø0.1 mm - ø3 mm / L/D = 5, 10, 15

J048 - J050

FDC

ø5 mm - ø16 mm / L/D = 5, 8

J051 - J052

CDS

ø0.4 mm - ø13 mm / L/D = 5 - 12

J053

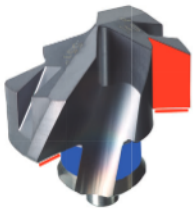
DRILLMEISTER

Exchangeable head system for easy operation

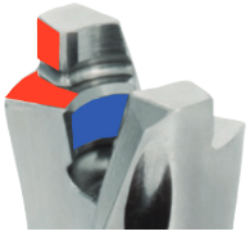
High accuracy, rigidity, and productivity

- Unique clamping structure provides high repeatability and reliability
- One-action head changing reduces tool set up time
- No re-grinding cost and reduced tool inventory requirements

Drill head



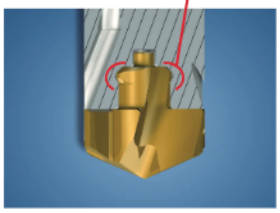
Drill body



■ Contact area that supports the drill head against cutting force

■ Contact area that maintains the accurate drill position

Groove to prevent the head from falling off



Increased body durability

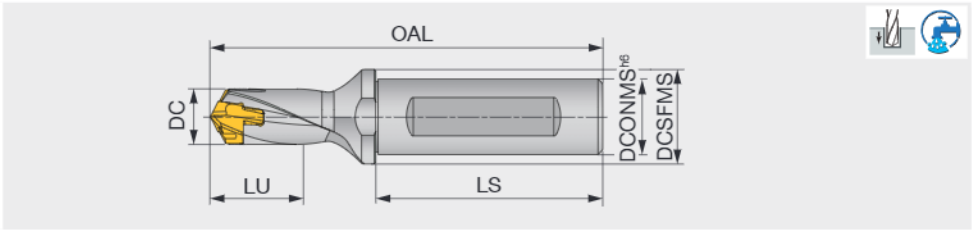
- The new clamping mechanism greatly reduces the damage on cutting edges due to less holding power as seen with the competitors, which leads to long tool life.
- The unique clamping design prevents the head from falling off.

Reference pages: J011 - J027, Technical reference → L073

DRILLMEISTER

TID L/D=1.5

Head changeable drill



Designation	DC	DCONMS	DCSFMS	LU	LS	OAL		Pocket size	Head
						DMP	DMC		
TID060F12-1.5	6 - 6.4	12	16	10.1	45	68	-	6	DMP060 - DMP064
TID065F12-1.5	6.5 - 6.9	12	16	11.2	45	69.1	-	6	DMP065 - DMP069
TID070F12-1.5	7 - 7.4	12	16	12.3	45	70.1	-	7	DMP070 - DMP074
TID075F12-1.5	7.5 - 7.9	12	16	12.7	45	70.9	-	7	DMP075 - DMP079
TID080F12-1.5	8 - 8.9	12	16	13.5	45	72.4	-	8	DMP080 - DMP089
TID090F12-1.5	9 - 9.9	12	16	15.6	45	74.3	-	9	DMP090 - DMP099
TID100F16-1.5	10 - 10.9	16	20	16.8	48	79.2	79.8	10	DM*100 - DM*109
TID110F16-1.5	11 - 11.9	16	20	19	48	81.1	81.7	11	DM*110 - DM*119
TID120F16-1.5	12 - 12.9	16	20	20.2	48	83	83.6	12	DM*120 - DM*129
TID130F16-1.5	13 - 13.9	16	20	22.4	48	85.1	85.9	13	DM*130 - DM*139
TID140F16-1.5	14 - 14.9	16	20	23.5	48	89.1	89.9	14	DM*140 - DM*149
TID150F20-1.5	15 - 15.9	20	25	25.7	50	96.2	97.1	15	DM*150 - DM*159
TID160F20-1.5	16 - 16.9	20	25	26.9	50	99.3	100.3	16	DM*160 - DM*169
TID170F20-1.5	17 - 17.9	20	25	29.1	50	102.4	103.4	17	DM*170 - DM*179
TID180F25-1.5	18 - 18.9	25	32	30.3	56	111.5	112.6	18	DM*180 - DM*189
TID190F25-1.5	19 - 19.9	25	32	32.5	56	114.5	115.6	19	DM*190 - DM*199
TID200F25-1.5	20 - 20.9	25	32	33.6	56	117.6	-	20	DMP200 - DMP209
TID210F25-1.5	21 - 21.9	25	32	35.8	56	120.7	-	21	DMP210 - DMP219
TID220F25-1.5	22 - 22.9	25	32	37	56	123.8	-	22	DMP220 - DMP229
TID230F32-1.5	23 - 23.9	32	42	39.2	60	130.8	-	23	DMP230 - DMP239
TID240F32-1.5	24 - 24.9	32	42	40.4	60	133.9	-	24	DMP240 - DMP249
TID250F32-1.5	25 - 25.9	32	42	42.5	60	137	-	25	DMP250 - DMP259

Tool diameter	Hole diameter tolerance*
ø6 - ø25.9	+0.05 / 0

*Just for reference

Note : An overall length (OAL) differs for when the DMP insert is mounted and when the DMC is mounted. (No difference for the drill shoulder)

SPARE PARTS

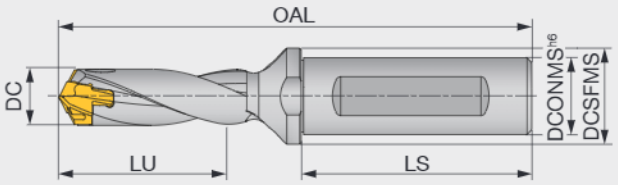
Designation	Clamping key
TID060-090	K-TID6-9.99
TID100-190	K-TID10-19.99
TID200-250	K-TID20-26.99

Reference pages: Head → J020 - J025
Standard cutting conditions → J026

DRILLMEISTER

TID L/D=3

Head changeable drill



Designation	DC	DCONMS	DCSFMS	LU	LS	OAL		Pocket size	Head
						DMP	DMC		
TID060F12-3	6 - 6.4	12	16	19.1	45	77	-	6	DMP060 - DMP064
TID065F12-3	6.5 - 6.9	12	16	21.2	45	78.8	-	6	DMP065 - DMP069
TID070F12-3	7 - 7.4	12	16	22.3	45	80.6	-	7	DMP070 - DMP074
TID075F12-3	7.5 - 7.9	12	16	24.4	45	82.1	-	7	DMP075 - DMP079
TID080F12-3	8 - 8.4	12	16	25.5	45	84.4	-	8	DMP080 - DMP084
TID085F12-3	8.5 - 8.9	12	16	27.5	45	85.9	-	8	DMP085 - DMP089
TID090F12-3	9 - 9.4	12	16	28.6	45	87.8	-	9	DMP090 - DMP094
TID095F12-3	9.5 - 9.9	12	16	30.7	45	89.3	-	9	DMP095 - DMP099
TID100F16-3	10 - 10.4	16	20	31.8	48	94.2	94.8	10	DM*100 - DM*104
TID105F16-3	10.5 - 10.9	16	20	33.9	48	95.7	96.3	10	DM*105 - DM*109
TID110F16-3	11 - 11.4	16	20	35	48	97.6	98.2	11	DM*110 - DM*114
TID115F16-3	11.5 - 11.9	16	20	37.1	48	99.1	99.7	11	DM*115 - DM*119
TID120F16-3	12 - 12.4	16	20	38.2	48	101	101.6	12	DM*120 - DM*124
TID125F16-3	12.5 - 12.9	16	20	39.3	48	102.5	103.1	12	DM*125 - DM*129
TID130F16-3	13 - 13.4	16	20	41.4	48	104.6	105.4	13	DM*130 - DM*134
TID135F16-3	13.5 - 13.9	16	20	43.5	48	106.1	106.9	13	DM*135 - DM*139
TID140F16-3	14 - 14.4	16	20	44.5	48	110.1	110.9	14	DM*140 - DM*144
TID145F16-3	14.5 - 14.9	16	20	46.6	48	111.6	112.4	14	DM*145 - DM*149
TID150F20-3	15 - 15.9	20	25	47.7	50	118.7	119.6	15	DM*150 - DM*159
TID160F20-3	16 - 16.9	20	25	50.9	50	123.3	124.3	16	DM*160 - DM*169
TID170F20-3	17 - 17.9	20	25	54.1	50	127.9	128.9	17	DM*170 - DM*179
TID180F25-3	18 - 18.9	25	32	57.3	56	138.5	139.6	18	DM*180 - DM*189
TID190F25-3	19 - 19.9	25	32	60.5	56	143	144.1	19	DM*190 - DM*199
TID200F25-3	20 - 20.9	25	32	63.6	56	147.6	-	20	DMP200 - DMP209
TID210F25-3	21 - 21.9	25	32	66.8	56	152.2	-	21	DMP210 - DMP219
TID220F25-3	22 - 22.9	25	32	70	56	156.8	-	22	DMP220 - DMP229
TID230F32-3	23 - 23.9	32	42	73.2	60	165.3	-	23	DMP230 - DMP239
TID240F32-3	24 - 24.9	32	42	76.4	60	169.9	-	24	DMP240 - DMP249
TID250F32-3	25 - 25.9	32	42	79.5	60	174.5	-	25	DMP250 - DMP259

Tool diameter	Hole diameter tolerance*
ø6 - ø25.9	+0.05 / 0

*Just for reference

Note : An overall length (OAL) differs for when the DMP insert is mounted and when the DMC is mounted. (No difference for the drill shoulder)

SPARE PARTS

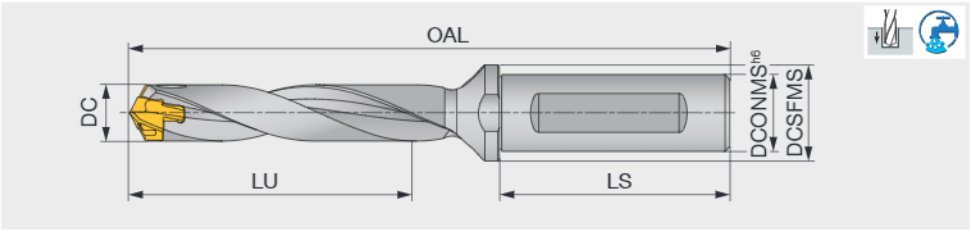
Designation	Clamping key
TID060-095	K-TID6-9.99
TID100-190	K-TID10-19.99
TID200-250	K-TID20-26.99

Reference pages: Head → J020 - J025
Standard cutting conditions → J026

DRILLMEISTER

TID L/D=5

Head changeable drill



Designation	DC	DCONMS	DCSFMS	LU	LS	OAL		Pocket size	Head
						DMP	DMC		
TID060F12-5	6 - 6.4	12	16	31.1	45	89	-	6	DMP060 - DMP064
TID065F12-5	6.5 - 6.9	12	16	34.2	45	91.8	-	6	DMP065 - DMP069
TID070F12-5	7 - 7.4	12	16	36.3	45	94.6	-	7	DMP070 - DMP074
TID075F12-5	7.5 - 7.9	12	16	39.4	45	97.1	-	7	DMP075 - DMP079
TID080F12-5	8 - 8.4	12	16	41.5	45	100.4	-	8	DMP080 - DMP084
TID085F12-5	8.5 - 8.9	12	16	44.5	45	102.9	-	8	DMP085 - DMP089
TID090F12-5	9 - 9.4	12	16	46.6	45	105.8	-	9	DMP090 - DMP094
TID095F12-5	9.5 - 9.9	12	16	49.7	45	108.3	-	9	DMP095 - DMP099
TID100F16-5	10 - 10.4	16	20	51.8	48	114.2	114.8	10	DM*100 - DM*104
TID105F16-5	10.5 - 10.9	16	20	54.9	48	116.7	117.3	10	DM*105 - DM*109
TID110F16-5	11 - 11.4	16	20	57	48	119.6	120.2	11	DM*110 - DM*114
TID115F16-5	11.5 - 11.9	16	20	60.1	48	122.1	122.7	11	DM*115 - DM*119
TID120F16-5	12 - 12.4	16	20	62.2	48	125	125.6	12	DM*120 - DM*124
TID125F16-5	12.5 - 12.9	16	20	64.3	48	127.5	128.1	12	DM*125 - DM*129
TID130F16-5	13 - 13.4	16	20	67.4	48	130.6	131.4	13	DM*130 - DM*134
TID135F16-5	13.5 - 13.9	16	20	70.5	48	133.1	133.9	13	DM*135 - DM*139
TID140F16-5	14 - 14.4	16	20	72.5	48	138.2	139	14	DM*140 - DM*144
TID145F16-5	14.5 - 14.9	16	20	75.6	48	140.7	141.5	14	DM*145 - DM*149
TID150F20-5	15 - 15.9	20	25	77.7	50	148.7	149.6	15	DM*150 - DM*159
TID160F20-5	16 - 16.9	20	25	82.9	50	155.3	156.3	16	DM*160 - DM*169
TID170F20-5	17 - 17.9	20	25	88.1	50	161.9	162.9	17	DM*170 - DM*179
TID180F25-5	18 - 18.9	25	32	93.3	56	174.5	175.6	18	DM*180 - DM*189
TID190F25-5	19 - 19.9	25	32	98.5	56	181	182.1	19	DM*190 - DM*199
TID200F25-5	20 - 20.9	25	32	103.6	56	187.6	-	20	DMP200 - DMP209
TID210F25-5	21 - 21.9	25	32	108.8	56	194.2	-	21	DMP210 - DMP219
TID220F25-5	22 - 22.9	25	32	114	56	200.8	-	22	DMP220 - DMP229
TID230F32-5	23 - 23.9	32	42	119.2	60	211.3	-	23	DMP230 - DMP239
TID240F32-5	24 - 24.9	32	42	124.4	60	217.9	-	24	DMP240 - DMP249
TID250F32-5	25 - 25.9	32	42	129.5	60	224.5	-	25	DMP250 - DMP259

Tool diameter	Hole diameter tolerance*
ø6 - ø17.9	+0.06 / 0
ø18 - ø25.9	+0.065 / 0

*Just for reference

Note : An overall length (OAL) differs for when the DMP insert is mounted and when the DMC is mounted. (No difference for the drill shoulder)

SPARE PARTS

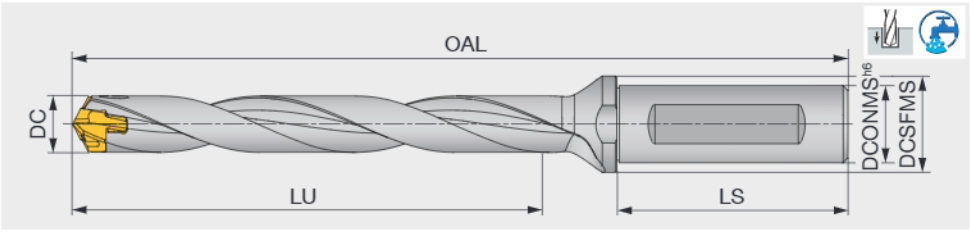
Designation	Clamping key
TID060-095	K-TID6-9.99
TID100-190	K-TID10-19.99
TID200-250	K-TID20-26.99

Reference pages: Head → J020 - J025
Standard cutting conditions → J026

DRILLMEISTER

TID L/D=8

Head changeable drill



Designation	DC	DCONMS	DCSFMS	LU	LS	OAL		Pocket size	Head
						DMP	DMC		
TID070F12-8	7 - 7.4	12	16	57.3	45	115.6	-	7	DMP070 - DMP074
TID075F12-8	7.5 - 7.9	12	16	61.4	45	119.6	-	7	DMP075 - DMP079
TID080F12-8	8 - 8.4	12	16	65.5	45	124.4	-	8	DMP080 - DMP084
TID085F12-8	8.5 - 8.9	12	16	69.5	45	128.4	-	8	DMP085 - DMP089
TID090F12-8	9 - 9.4	12	16	73.6	45	132.8	-	9	DMP090 - DMP094
TID095F12-8	9.5 - 9.9	12	16	77.7	45	136.8	-	9	DMP095 - DMP099
TID100F16-8	10 - 10.4	16	20	81.8	48	144.2	144.8	10	DM*100 - DM*104
TID105F16-8	10.5 - 10.9	16	20	85.9	48	148.2	148.8	10	DM*105 - DM*109
TID110F16-8	11 - 11.4	16	20	90	48	152.6	153.2	11	DM*110 - DM*114
TID115F16-8	11.5 - 11.9	16	20	94.1	48	156.6	157.2	11	DM*115 - DM*119
TID120F16-8	12 - 12.4	16	20	98.2	48	161	161.6	12	DM*120 - DM*124
TID125F16-8	12.5 - 12.9	16	20	102.3	48	165	165.6	12	DM*125 - DM*129
TID130F16-8	13 - 13.4	16	20	106.4	48	169.6	170.4	13	DM*130 - DM*134
TID135F16-8	13.5 - 13.9	16	20	110.5	48	173.6	174.4	13	DM*135 - DM*139
TID140F16-8	14 - 14.4	16	20	114.5	48	180.1	180.9	14	DM*140 - DM*144
TID145F16-8	14.5 - 14.9	16	20	118.6	48	184.2	185	14	DM*145 - DM*149
TID150F20-8	15 - 15.9	20	25	122.7	50	193.7	194.6	15	DM*150 - DM*159
TID160F20-8	16 - 16.9	20	25	130.9	50	203.3	204.3	16	DM*160 - DM*169
TID170F20-8	17 - 17.9	20	25	139.1	50	212.9	213.9	17	DM*170 - DM*179
TID180F25-8	18 - 18.9	25	32	147.3	56	228.5	229.6	18	DM*180 - DM*189
TID190F25-8	19 - 19.9	25	32	155.5	56	238	239.1	19	DM*190 - DM*199
TID200F25-8	20 - 20.9	25	32	163.6	56	247.6	-	20	DMP200 - DMP209
TID210F25-8	21 - 21.9	25	32	171.8	56	257.2	-	21	DMP210 - DMP219
TID220F25-8	22 - 22.9	25	32	180	56	266.8	-	22	DMP220 - DMP229
TID230F32-8	23 - 23.9	32	42	188.2	60	280.3	-	23	DMP230 - DMP239
TID240F32-8	24 - 24.9	32	42	196.4	60	289.9	-	24	DMP240 - DMP249
TID250F32-8	25 - 25.9	32	42	204.5	60	299.5	-	25	DMP250 - DMP259

Tool diameter	Hole diameter tolerance*
ø7 - ø17.9	+0.07 / 0
ø18 - ø25.9	+0.085 / 0

*Just for reference

Note : An overall length (OAL) differs for when the DMP insert is mounted and when the DMC is mounted. (No difference for the drill shoulder)

SPARE PARTS

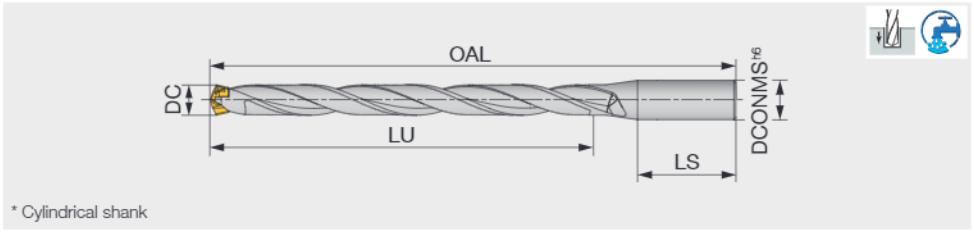
Designation	Clamping key
TID060-095	K-TID6-9.99
TID100-190	K-TID10-19.99
TID200-250	K-TID20-26.99

Reference pages: Head → J020 - J025
Standard cutting conditions → J026

DRILLMEISTER

TID L/D=12

Head changeable drill



* Cylindrical shank

Designation	DC	DCONMS	LU	LS	OAL		Pocket size	Head
					DMP	DMC		
TID080R12-12	8 - 8.4	12	97.5	45	156.4	-	8	DM*080-DM*084
TID085R12-12	8.5 - 8.9	12	103.5	45	162.4	-	8	DM*085-DM*089
TID090R12-12	9 - 9.4	12	109.6	45	168.8	-	9	DM*090-DM*094
TID095R12-12	9.5 - 9.9	12	115.7	45	174.8	-	9	DM*095-DM*099
TID100R16-12	10 - 10.4	16	121.8	48	184.2	184.8	10	DM*100-DM*104
TID105R16-12	10.5 - 10.9	16	127.9	48	190.2	190.8	10	DM*105-DM*109
TID110R16-12	11 - 11.4	16	134.0	48	196.6	197.2	11	DM*110-DM*114
TID115R16-12	11.5 - 11.9	16	140.1	48	202.6	203.2	11	DM*115-DM*119
TID120R16-12	12 - 12.4	16	146.2	48	209	209.6	12	DM*120 - DM*124
TID125R16-12	12.5 - 12.9	16	152.3	48	215	215.6	12	DM*125 - DM*129
TID130R16-12	13 - 13.4	16	158.4	48	221.6	222.4	13	DM*130 - DM*134
TID135R16-12	13.5 - 13.9	16	164.5	48	227.6	228.4	13	DM*135 - DM*139
TID140R16-12	14 - 14.4	16	170.5	48	236.2	237	14	DM*140 - DM*144
TID145R16-12	14.5 - 14.9	16	176.6	48	242.2	243	14	DM*145 - DM*149
TID150R20-12	15 - 15.9	20	182.7	50	253.7	254.6	15	DM*150 - DM*159
TID160R20-12	16 - 16.9	20	194.9	50	267.3	268.3	16	DM*160 - DM*169
TID170R20-12	17 - 17.9	20	207.1	50	280.9	281.9	17	DM*170 - DM*179
TID180R25-12	18 - 18.9	25	219.3	56	300.5	301.6	18	DM*180 - DM*189
TID190R25-12	19 - 19.9	25	231.5	56	314	315.1	19	DM*190 - DM*199
TID200R25-12	20 - 20.9	25	243.6	56	327.6	-	20	DM*200 - DM*209
TID210R25-12	21 - 21.9	25	255.8	56	341.2	-	21	DM*210 - DM*219
TID220R25-12	22 - 22.9	25	268	56	354.8	-	22	DM*220 - DM*229

Note : An overall length (OAL) differs for when the DMP insert is mounted and when the DMC is mounted. (No difference for the drill shoulder)

Tool diameter	Hole diameter tolerance*
ø8 - ø17.9	+0.08 / 0
ø18 - ø22.9	+0.095 / 0

*Just for reference

SPARE PARTS

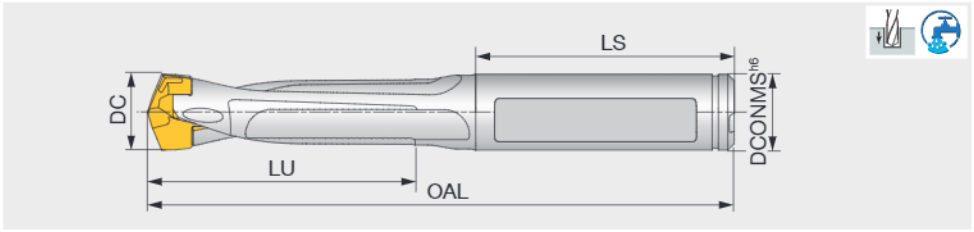
Designation	Clamping key
TID100-190	K-TID10-19.99
TID200-220	K-TID20-26.99

Reference pages: Head → J020 - J025
Standard cutting conditions → J026

DRILLMEISTER

TIDC L/D=3

Head changeable drill



Designation	DC	DCONMS	LU	LS	OAL		Pocket size	Head
					DMP	DMC		
TIDC100C10-3	10 - 10.4	10	31.8	41	86.1	86.7	10	DM*100 - DM*104
TIDC105C11-3	10.5 - 10.9	11	33.4	41	87.6	88.2	10	DM*105 - DM*109
TIDC110C11-3	11 - 11.4	11	35	41	89.5	90.1	11	DM*110 - DM*114
TIDC115C12-3	11.5 - 11.9	12	36.6	41	91	91.6	11	DM*115 - DM*119
TIDC120C12-3	12 - 12.4	12	38.2	41	92.8	93.4	12	DM*120 - DM*124
TIDC125C13-3	12.5 - 12.9	13	39.8	46	98.3	98.9	12	DM*125 - DM*129
TIDC130C13-3	13 - 13.4	13	41.4	47	102.4	103.2	13	DM*130 - DM*134
TIDC135C14-3	13.5 - 13.9	14	43	43	99.9	100.7	13	DM*135 - DM*139
TIDC140C14-3	14 - 14.4	14	44.5	44	103	103.8	14	DM*140 - DM*144
TIDC145C15-3	14.5 - 14.9	15	46.1	45	105.5	106.3	14	DM*145 - DM*149
TIDC150C15-3	15 - 15.9	15	47.7	45	107.5	108.4	15	DM*150 - DM*159
TIDC160C16-3	16 - 16.9	16	50.9	48	117.5	118.5	16	DM*160 - DM*169
TIDC170C17-3	17 - 17.9	17	54.1	48	119.7	120.7	17	DM*170 - DM*179
TIDC180C18-3	18 - 18.9	18	57.3	48	123.3	124.4	18	DM*180 - DM*189
TIDC190C19-3	19 - 19.9	19	60.5	54	132.4	133.5	19	DM*190 - DM*199

Tool diameter	Hole diameter tolerance*
ø10 - ø19.9	+0.05 / 0

*Just for reference

Note : An overall length (OAL) differs for when the DMP insert is mounted and when the DMC is mounted. (No difference for the drill shoulder)

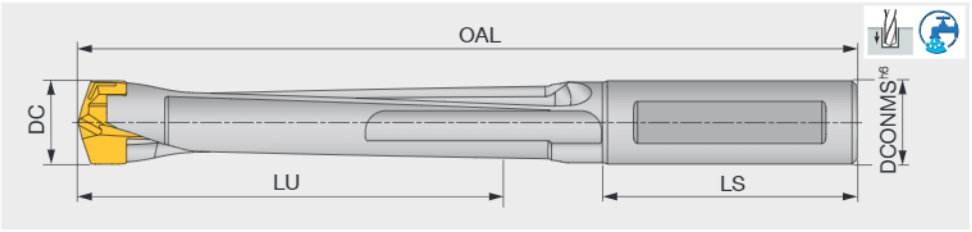
SPARE PARTS

Designation	Clamping key
TIDC100-190	K-TID10-19.99

Reference pages: Head → J020 - J025
Standard cutting conditions → J026

TIDC L/D=5

Head changeable drill



Designation	DC	DCONMS	LU	LS	OAL		Pocket size	Head
					DMP	DMC		
TIDC100C10-5	10 - 10.4	10	51.8	41	106.1	106.7	10	DM*100 - DM*104
TIDC105C11-5	10.5 - 10.9	11	54.4	41	108.6	109.2	10	DM*105 - DM*109
TIDC110C11-5	11 - 11.4	11	57	41	111.5	112.1	11	DM*110 - DM*114
TIDC115C12-5	11.5 - 11.9	12	59.6	41	114	114.6	11	DM*115 - DM*119
TIDC120C12-5	12 - 12.4	12	62.2	41	116.8	117.4	12	DM*120 - DM*124
TIDC125C13-5	12.5 - 12.9	13	64.8	46	124.3	124.9	12	DM*125 - DM*129
TIDC130C13-5	13 - 13.4	13	67.4	47	128.4	129.2	13	DM*130 - DM*134
TIDC135C14-5	13.5 - 13.9	14	70	43	126.9	127.7	13	DM*135 - DM*139
TIDC140C14-5	14 - 14.4	14	72.5	44	131	131.8	14	DM*140 - DM*144
TIDC145C15-5	14.5 - 14.9	15	75.1	45	134.5	135.3	14	DM*145 - DM*149
TIDC150C15-5	15 - 15.9	15	77.7	45	137.5	138.4	15	DM*150 - DM*159
TIDC160C16-5	16 - 16.9	16	82.9	48	149.5	150.5	16	DM*160 - DM*169
TIDC170C17-5	17 - 17.9	17	88.1	48	153.7	154.7	17	DM*170 - DM*179
TIDC180C18-5	18 - 18.9	18	93.3	48	159.3	160.4	18	DM*180 - DM*189
TIDC190C19-5	19 - 19.9	19	98.5	54	170.4	171.5	19	DM*190 - DM*199

Tool diameter	Hole diameter tolerance*
ø10 - ø19.9	+0.05 / 0

Note : An overall length (OAL) differs for when the DMP insert is mounted and when the DMC is mounted. (No difference for the drill shoulder)

*Just for reference

SPARE PARTS

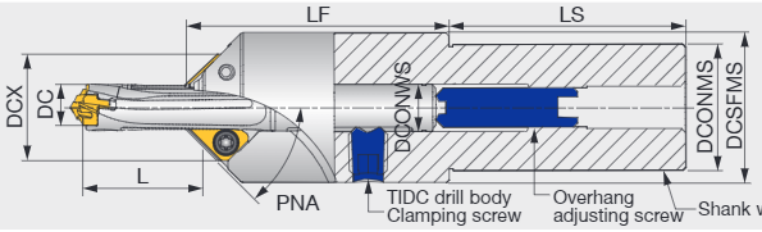
Designation	Clamping key
TIDC100-190	K-TID10-19.99

Reference pages: Head → J020 - J025
Standard cutting conditions → J026

DRILLMEISTER

TIDCF

Chamfering adapter



Designation	DC	DCONMS	DCSFMS	DCX	LF	LS	L* L/D = 3	L* L/D = 5	Drill body	DCONWS
TIDCF100-W32	10 - 10.4	32	38	24.9	67.3	60	14.5 - 31.8	31.7 - 51.8	TIDC100C10-...	10
TIDCF110-W32	10.5 - 10.9	32	38	25.9	67.3	60	15.7 - 33.3	31.2 - 54.2	TIDC105C11-...	11
TIDCF110-W32	11 - 11.4	32	38	25.9	67.3	60	16.2 - 35.3	34.1 - 57.3	TIDC110C11-...	11
TIDCF120-W32	11.5 - 11.9	32	38	26.9	67.3	60	15.1 - 36.7	33.8 - 59.4	TIDC115C12-...	12
TIDCF120-W32	12 - 12.4	32	38	26.9	67.3	60	16.5 - 37.7	36.6 - 61.6	TIDC120C12-...	12
TIDCF130-W32	12.5 - 12.9	32	38	27.9	67.3	60	16.1 - 39.6	39.7 - 64.8	TIDC125C13-...	13
TIDCF130-W32	13 - 13.4	32	38	27.9	67.3	60	17.5 - 41.5	42.7 - 68	TIDC130C13-...	13
TIDCF140-W32	13.5 - 13.9	32	38	28.4	67.3	60	17.7 - 42.9	41.4 - 70.3	TIDC135C14-...	14
TIDCF140-W32	14 - 14.4	32	38	28.4	67.3	60	18.1 - 45	44.8 - 73.1	TIDC140C14-...	14
TIDCF150-W32	14.5 - 14.9	32	38	29.4	67.3	60	19.2 - 44.6	44 - 73.9	TIDC145C15-...	15
TIDCF150-W32	15 - 15.9	32	38	29.4	67.3	60	19.7 - 47.4	47.6 - 80.7	TIDC150C15-...	15
TIDCF160-W32	16 - 16.9	32	38	30.4	67.3	60	19.5 - 55.3	57 - 87.5	TIDC160C16-...	16
TIDCF170-W32	17 - 17.9	32	38	31.4	67.3	60	21.4 - 54.9	55.9 - 88.5	TIDC170C17-...	17
TIDCF180-W32	18 - 18.9	32	38	32.4	67.3	60	24.2 - 65.2	60 - 93	TIDC180C18-...	18
TIDCF190-W32	19 - 19.9	32	38	33.4	75	60	28.5 - 62.3	67 - 100	TIDC190C19-...	19

L* is the dimension when using 45° chamfering insert.

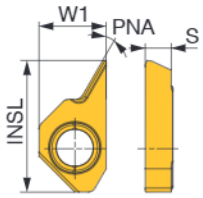
SPARE PARTS

Designation	Clamping screw	Grip	Overhang adjusting screw	Clamping screw of TIDC drill body	Torx bit	Wrench
TIDCF	SR14-544/S	SW6-SD	SRM10X10DIN916	SRM10X1.5S	BT15S	HW5.0

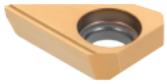
Recommended clamping torque (N·m) : SR14-544/S=4.8

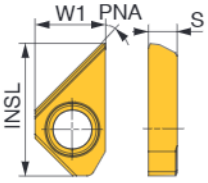
CHAMFERING INSERT

XHGT-30A

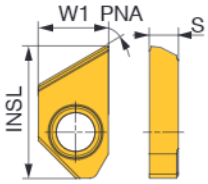


XHGR-45A





XHGR-60A



P	Steel	★	
M	Stainless	★	
K	Cast iron	★	
N	Non-ferrous	☆	
S	Superalloys	★	
H	Hard materials	★	

★ : First choice
☆ : Second choice

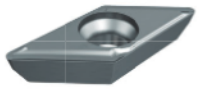
Designation	W1	S	Coated GH730	Chamfering angle PNA	Maximum width of chamfer **
XHGT090300-30A	8.5	3.3	●	30°	1.5
XHGR090300-45A	8.5	3.3	●	45°	6
XHGR090300-60A	8.5	3.3	●	60°	3.5

● : Line up
2 pieces per package

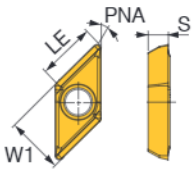
**Please reduce the feed rate to half when chamfering over 60% of maximum width of chamfer.

INSERT FOR SPECIAL CHAMFERING ADAPTERS

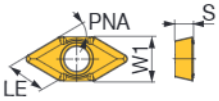
AOMT...



AOMT**-C45



AOMT**-N-**DT



P	Steel	★	
M	Stainless	★	
K	Cast iron	★	
N	Non-ferrous	☆	
S	Superalloys	★	
H	Hard materials	★	

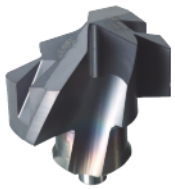
★ : First choice
☆ : Second choice

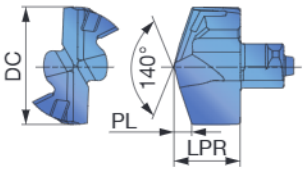
Designation	W1	S	Coated GH730	LE	Chamfering angle PNA
AOMT060204-C45	5.66	1.96	●	4.5	45°
AOMT030204-N-30DT	4	1.59	●	4	30°
AOMT030204-N-45DT	2.8	1.59	●	4	45°

● : Line up

DRILL HEAD

DMP General purpose





Tool diameter	Head diameter tolerance
ø6 - ø17.9	+0.018 / 0
ø18 - ø25.9	+0.021 / 0

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	☆
S	Superalloys	★
H	Hard materials	★

★ : First choice
☆ : Second choice

Designation	DC	LPR	Coated	PL	SSC	Pocket Size	Body
			AH725				
DMP060	6	4	●	1.09	6	6	TID*060...
DMP061	6.1	4	●	1.11	6	6	TID*060...
DMP062	6.2	4	●	1.13	6	6	TID*060...
DMP063	6.3	4	●	1.15	6	6	TID*060...
DMP064	6.4	4	●	1.16	6	6	TID*060...
DMP065	6.5	4.3	●	1.18	6	6	TID*065...
DMP066	6.6	4.3	●	1.2	6	6	TID*065...
DMP067	6.7	4.3	●	1.22	6	6	TID*065...
DMP068	6.8	4.3	●	1.24	6	6	TID*065...
DMP069	6.9	4.3	●	1.26	6	6	TID*065...
DMP070	7	4.6	●	1.27	7	7	TID*070...
DMP071	7.1	4.6	●	1.29	7	7	TID*070...
DMP072	7.2	4.6	●	1.31	7	7	TID*070...
DMP073	7.3	4.6	●	1.33	7	7	TID*070...
DMP074	7.4	4.6	●	1.35	7	7	TID*070...
DMP075	7.5	4.6	●	1.36	7	7	TID*075...
DMP076	7.6	4.6	●	1.38	7	7	TID*075...
DMP077	7.7	4.6	●	1.4	7	7	TID*075...
DMP078	7.8	4.6	●	1.42	7	7	TID*075...
DMP079	7.9	4.6	●	1.44	7	7	TID*075...
DMP080	8	5.4	●	1.46	8	8	TID*080...
DMP081	8.1	5.4	●	1.47	8	8	TID*080...
DMP082	8.2	5.4	●	1.49	8	8	TID*080...
DMP083	8.3	5.4	●	1.51	8	8	TID*080...
DMP084	8.4	5.4	●	1.53	8	8	TID*080...
DMP085	8.5	5.4	●	1.55	8	8	TID*085...
DMP086	8.6	5.4	●	1.57	8	8	TID*085...
DMP087	8.7	5.4	●	1.58	8	8	TID*085...
DMP088	8.80	5.4	●	1.6	8	8	TID*085...
DMP089	8.9	5.4	●	1.62	8	8	TID*085...
DMP090	9	5.8	●	1.64	9	9	TID*090...
DMP091	9.1	5.8	●	1.66	9	9	TID*090...
DMP092	9.2	5.8	●	1.67	9	9	TID*090...
DMP093	9.3	5.8	●	1.69	9	9	TID*090...
DMP094	9.4	5.8	●	1.71	9	9	TID*090...
DMP095	9.5	5.8	●	1.73	9	9	TID*095...
DMP096	9.6	5.8	●	1.75	9	9	TID*095...
DMP097	9.7	5.8	●	1.77	9	9	TID*095...
DMP098	9.8	5.8	●	1.78	9	9	TID*095...
DMP099	9.9	5.8	●	1.8	9	9	TID*095...
DMP100	10	6.05	●	6.05	10	10	TID*100...
DMP101	10.1	6.05	●	6.05	10	10	TID*100...
DMP102	10.2	6.05	●	6.05	10	10	TID*100...
DMP103	10.3	6.05	●	6.05	10	10	TID*100...
DMP104	10.4	6.05	●	6.05	10	10	TID*100...

●: Line up

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	☆
S	Superalloys	★
H	Hard materials	★

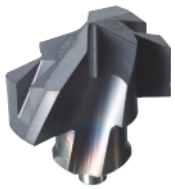
★ : First choice
☆ : Second choice

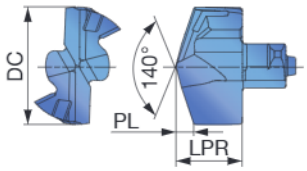
Designation	DC	LPR	Coated														PL	SSC	Pocket Size	Body
			AH725																	
DMP105	10.5	6.05	●														6.05	10	10	TID*105...
DMP106	10.6	6.05	●														6.05	10	10	TID*105...
DMP107	10.7	6.05	●														6.05	10	10	TID*105...
DMP108	10.8	6.05	●														6.05	10	10	TID*105...
DMP109	10.9	6.05	●														6.05	10	10	TID*105...
DMP110	11	6.45	●														6.45	11	11	TID*110...
DMP111	11.1	6.45	●														6.45	11	11	TID*110...
DMP112	11.2	6.45	●														6.45	11	11	TID*110...
DMP113	11.3	6.45	●														6.45	11	11	TID*110...
DMP114	11.4	6.45	●														6.45	11	11	TID*110...
DMP115	11.5	6.45	●														6.45	11	11	TID*115...
DMP116	11.6	6.45	●														6.45	11	11	TID*115...
DMP117	11.7	6.45	●														6.45	11	11	TID*115...
DMP118	11.8	6.45	●														6.45	11	11	TID*115...
DMP119	11.9	6.45	●														6.45	11	11	TID*115...
DMP120	12	6.8	●														6.8	12	12	TID*120...
DMP121	12.1	6.8	●														6.8	12	12	TID*120...
DMP122	12.2	6.8	●														6.8	12	12	TID*120...
DMP123	12.3	6.8	●														6.8	12	12	TID*120...
DMP124	12.4	6.8	●														6.8	12	12	TID*120...
DMP125	12.5	6.8	●														6.8	12	12	TID*125..
DMP126	12.6	6.8	●														6.8	12	12	TID*125..
DMP127	12.7	6.8	●														6.8	12	12	TID*125..
DMP128	12.8	6.8	●														6.8	12	12	TID*125..
DMP129	12.9	6.8	●														6.8	12	12	TID*125..
DMP130	13	7.4	●														7.4	13	13	TID*130...
DMP131	13.1	7.4	●														7.4	13	13	TID*130...
DMP132	13.2	7.4	●														7.4	13	13	TID*130...
DMP133	13.3	7.4	●														7.4	13	13	TID*130...
DMP134	13.4	7.4	●														7.4	13	13	TID*130...
DMP135	13.5	7.4	●														7.4	13	13	TID*135...
DMP136	13.6	7.4	●														7.4	13	13	TID*135...
DMP137	13.7	7.4	●														7.4	13	13	TID*135...
DMP138	13.8	7.4	●														7.4	13	13	TID*135...
DMP139	13.90	7.4	●														7.4	13	13	TID*135...
DMP140	14	7.95	●														2.55	14	14	TID*140...
DMP141	14.1	7.95	●														2.57	14	14	TID*140...
DMP142	14.2	7.95	●														2.58	14	14	TID*140...
DMP143	14.3	7.95	●														2.6	14	14	TID*140...
DMP144	14.4	7.95	●														2.62	14	14	TID*140...
DMP145	14.5	7.95	●														2.64	14	14	TID*145...
DMP146	14.6	7.95	●														2.66	14	14	TID*145...
DMP147	14.7	7.95	●														2.68	14	14	TID*145...
DMP148	14.8	7.95	●														2.69	14	14	TID*145...
DMP149	14.9	7.95	●														2.71	14	14	TID*145...
DMP150	15	8.53	●														2.73	15	15	TID*150...
DMP151	15.1	8.53	●														2.75	15	15	TID*150...
DMP152	15.2	8.53	●														2.77	15	15	TID*150...
DMP153	15.3	8.53	●														2.78	15	15	TID*150...
DMP154	15.4	8.53	●														2.8	15	15	TID*150...
DMP155	15.5	8.53	●														2.82	15	15	TID*150...
DMP156	15.6	8.53	●														2.84	15	15	TID*150...
DMP157	15.7	8.53	●														2.86	15	15	TID*150...
DMP158	15.8	8.53	●														2.88	15	15	TID*150...
DMP159	15.9	8.53	●														2.89	15	15	TID*150...
DMP160	16	9.1	●														2.91	16	16	TID*160...
DMP161	16.1	9.1	●														2.93	16	16	TID*160...

ø6 - ø19.9 = 2 pieces per package
ø20 - ø25.9 = 1 piece per package

●: Line up

DMP General purpose





Tool diameter	Head diameter tolerance
ø6 - ø17.9	+0.018 / 0
ø18 - ø25.9	+0.021 / 0

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	☆
S	Superalloys	★
H	Hard materials	★

★ : First choice
☆ : Second choice

Designation	DC	LPR	Coated	PL	SSC	Pocket Size	Body
			AH725				
DMP162	16.2	9.1	●	2.95	16	16	TID*160...
DMP163	16.3	9.1	●	2.97	16	16	TID*160...
DMP164	16.4	9.1	●	2.98	16	16	TID*160...
DMP165	16.5	9.1	●	3	16	16	TID*160...
DMP166	16.6	9.1	●	3.02	16	16	TID*160...
DMP167	16.7	9.1	●	3.04	16	16	TID*160...
DMP168	16.8	9.1	●	3.06	16	16	TID*160...
DMP169	16.9	9.1	●	3.08	16	16	TID*160...
DMP170	17	9.7	●	3.09	17	17	TID*170...
DMP171	17.1	9.7	●	3.11	17	17	TID*170...
DMP172	17.2	9.7	●	3.13	17	17	TID*170...
DMP173	17.3	9.7	●	3.15	17	17	TID*170...
DMP174	17.4	9.7	●	3.17	17	17	TID*170...
DMP175	17.5	9.7	●	3.18	17	17	TID*170...
DMP176	17.6	9.7	●	3.2	17	17	TID*170...
DMP177	17.7	9.7	●	3.22	17	17	TID*170...
DMP178	17.8	9.7	●	3.24	17	17	TID*170...
DMP179	17.9	9.7	●	3.26	17	17	TID*170...
DMP180	18	10.3	●	3.28	18	18	TID*180...
DMP181	18.1	10.3	●	3.29	18	18	TID*180...
DMP182	18.2	10.3	●	3.31	18	18	TID*180...
DMP183	18.3	10.3	●	3.33	18	18	TID*180...
DMP184	18.4	10.3	●	3.35	18	18	TID*180...
DMP185	18.5	10.3	●	3.37	18	18	TID*180...
DMP186	18.6	10.3	●	3.38	18	18	TID*180...
DMP187	18.7	10.3	●	3.4	18	18	TID*180...
DMP188	18.8	10.3	●	3.42	18	18	TID*180...
DMP189	18.9	10.3	●	3.44	18	18	TID*180...
DMP190	19	10.8	●	3.46	19	19	TID*190...
DMP191	19.1	10.8	●	3.48	19	19	TID*190...
DMP192	19.2	10.8	●	3.49	19	19	TID*190...
DMP193	19.3	10.8	●	3.51	19	19	TID*190...
DMP194	19.4	10.8	●	3.53	19	19	TID*190...
DMP195	19.5	10.8	●	3.55	19	19	TID*190...
DMP196	19.6	10.8	●	3.57	19	19	TID*190...
DMP197	19.7	10.8	●	3.59	19	19	TID*190...
DMP198	19.8	10.8	●	3.6	19	19	TID*190...
DMP199	19.9	10.8	●	3.62	19	19	TID*190...
DMP200	20	11.4	●	3.64	20	20	TID*200...
DMP201	20.1	11.4	●	3.66	20	20	TID*200...
DMP202	20.2	11.4	●	3.68	20	20	TID*200...
DMP203	20.3	11.4	●	3.69	20	20	TID*200...
DMP204	20.4	11.4	●	3.71	20	20	TID*200...
DMP205	20.5	11.4	●	3.73	20	20	TID*200...

●: Line up

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	☆
S	Superalloys	★
H	Hard materials	★

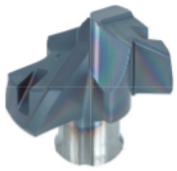
★ : First choice
☆ : Second choice

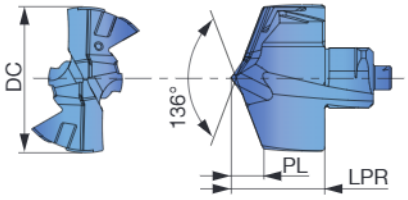
Designation	DC	LPR	Coated														PL	SSC	Pocket Size	Body
			AH725																	
DMP206	20.6	11.4	●														3.75	20	20	TID*200...
DMP207	20.7	11.4	●														3.77	20	20	TID*200...
DMP208	20.8	11.4	●														3.79	20	20	TID*200...
DMP209	20.9	11.4	●														3.8	20	20	TID*200...
DMP210	21	11.98	●														3.82	21	21	TID*210...
DMP211	21.1	11.98	●														3.84	21	21	TID*210...
DMP212	21.2	11.98	●														3.86	21	21	TID*210...
DMP213	21.3	11.98	●														3.88	21	21	TID*210...
DMP214	21.4	11.98	●														3.89	21	21	TID*210...
DMP215	21.5	11.98	●														3.91	21	21	TID*210...
DMP216	21.6	11.98	●														3.93	21	21	TID*210...
DMP217	21.7	11.98	●														3.95	21	21	TID*210...
DMP218	21.8	11.98	●														3.97	21	21	TID*210...
DMP219	21.9	11.98	●														3.99	21	21	TID*210...
DMP220	22	12.56	●														4	22	22	TID*220...
DMP221	22.1	12.56	●														4.02	22	22	TID*220...
DMP222	22.2	12.56	●														4.04	22	22	TID*220...
DMP223	22.3	12.56	●														4.06	22	22	TID*220...
DMP224	22.4	12.56	●														4.08	22	22	TID*220...
DMP225	22.5	12.56	●														4.09	22	22	TID*220...
DMP226	22.6	12.56	●														4.11	22	22	TID*220...
DMP227	22.7	12.56	●														4.13	22	22	TID*220...
DMP228	22.8	12.56	●														4.15	22	22	TID*220...
DMP229	22.9	12.56	●														4.17	22	22	TID*220...
DMP230	23	13.13	●														4.19	23	23	TID*230...
DMP231	23.1	13.13	●														4.2	23	23	TID*230...
DMP232	23.2	13.13	●														4.22	23	23	TID*230...
DMP233	23.3	13.13	●														4.24	23	23	TID*230...
DMP234	23.4	13.13	●														4.26	23	23	TID*230...
DMP235	23.5	13.13	●														4.28	23	23	TID*230...
DMP236	23.6	13.13	●														4.29	23	23	TID*230...
DMP237	23.7	13.13	●														4.31	23	23	TID*230...
DMP238	23.8	13.13	●														4.33	23	23	TID*230...
DMP239	23.9	13.13	●														4.35	23	23	TID*230...
DMP240	24	13.7	●														4.37	24	24	TID*240...
DMP241	24.1	13.7	●														4.39	24	24	TID*240...
DMP242	24.2	13.7	●														4.4	24	24	TID*240...
DMP243	24.3	13.7	●														4.42	24	24	TID*240...
DMP244	24.4	13.7	●														4.44	24	24	TID*240...
DMP245	24.5	13.7	●														4.46	24	24	TID*240...
DMP246	24.6	13.7	●														4.48	24	24	TID*240...
DMP247	24.7	13.7	●														4.5	24	24	TID*240...
DMP248	24.8	13.7	●														4.51	24	24	TID*240...
DMP249	24.9	13.7	●														4.53	24	24	TID*240...
DMP250	25	14.3	●														4.55	25	25	TID*250...
DMP251	25.1	14.3	●														4.57	25	25	TID*250...
DMP252	25.2	14.3	●														4.59	25	25	TID*250...
DMP253	25.3	14.3	●														4.6	25	25	TID*250...
DMP254	25.4	14.3	●														4.62	25	25	TID*250...
DMP255	25.5	14.3	●														4.64	25	25	TID*250...
DMP256	25.6	14.3	●														4.66	25	25	TID*250...
DMP257	25.7	14.3	●														4.68	25	25	TID*250...
DMP258	25.8	14.3	●														4.7	25	25	TID*250...
DMP259	25.9	14.3	●														4.71	25	25	TID*250...

ø10 - ø19.9 = 2 pieces per package

●: Line up

DMC High precision machining





Tool diameter	Head diameter tolerance
ø10 - ø17.9	+0.018 / 0
ø18 - ø19.9	+0.021 / 0

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	☆
S	Superalloys	★
H	Hard materials	★

★ : First choice
☆ : Second choice

Designation	DC	LPR	Coated	PL	SSC	Pocket Size	Body
			AH9130				
DMC100	10	6.67	●	2.09	10	10	TID*100...
DMC101	10.1	6.67	●	2.11	10	10	TID*100...
DMC102	10.2	6.67	●	2.13	10	10	TID*100...
DMC103	10.3	6.67	●	2.15	10	10	TID*100...
DMC104	10.4	6.67	●	2.17	10	10	TID*100...
DMC105	10.5	6.67	●	2.19	10	10	TID*105...
DMC106	10.6	6.67	●	2.21	10	10	TID*105...
DMC107	10.7	6.67	●	2.23	10	10	TID*105...
DMC108	10.8	6.67	●	2.25	10	10	TID*105...
DMC109	10.9	6.67	●	2.27	10	10	TID*105...
DMC110	11	7.1	●	2.32	11	11	TID*110...
DMC111	11.1	7.1	●	2.34	11	11	TID*110...
DMC112	11.2	7.1	●	2.36	11	11	TID*110...
DMC113	11.3	7.1	●	2.38	11	11	TID*110...
DMC114	11.4	7.1	●	2.4	11	11	TID*110...
DMC115	11.5	7.1	●	2.42	11	11	TID*115...
DMC116	11.6	7.1	●	2.44	11	11	TID*115...
DMC117	11.7	7.1	●	2.46	11	11	TID*115...
DMC118	11.8	7.1	●	2.48	11	11	TID*115...
DMC119	11.9	7.1	●	2.5	11	11	TID*115...
DMC120	12	7.43	●	2.45	12	12	TID*120...
DMC121	12.1	7.43	●	2.47	12	12	TID*120...
DMC122	12.2	7.43	●	2.49	12	12	TID*120...
DMC123	12.3	7.43	●	2.51	12	12	TID*120...
DMC124	12.4	7.43	●	2.53	12	12	TID*120...
DMC125	12.5	7.43	●	2.55	12	12	TID*125...
DMC126	12.6	7.43	●	2.57	12	12	TID*125...
DMC127	12.7	7.43	●	2.59	12	12	TID*125...
DMC128	12.8	7.43	●	2.61	12	12	TID*125...
DMC129	12.9	7.43	●	2.63	12	12	TID*125...
DMC130	13	8.15	●	2.71	13	13	TID*130...
DMC131	13.1	8.15	●	2.73	13	13	TID*130...
DMC132	13.2	8.15	●	2.75	13	13	TID*130...
DMC133	13.3	8.15	●	2.77	13	13	TID*130...
DMC134	13.4	8.15	●	2.79	13	13	TID*130...
DMC135	13.5	8.15	●	2.81	13	13	TID*135...
DMC136	13.6	8.15	●	2.83	13	13	TID*135...
DMC137	13.7	8.15	●	2.85	13	13	TID*135...
DMC138	13.8	8.15	●	2.87	13	13	TID*135...
DMC139	13.9	8.15	●	2.89	13	13	TID*135...
DMC140	14	8.76	●	2.93	14	14	TID*140...
DMC141	14.1	8.76	●	2.95	14	14	TID*140...
DMC142	14.2	8.76	●	2.97	14	14	TID*140...
DMC143	14.3	8.76	●	2.99	14	14	TID*140...
DMC144	14.4	8.76	●	3.01	14	14	TID*140...

●: Line up

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	☆
S	Superalloys	★
H	Hard materials	★

★ : First choice
☆ : Second choice

Designation	DC	LPR	Coated												PL	SSC	Pocket Size	Body
			AH9130															
DMC145	14.5	8.76	●												3.03	14	14	TID*145...
DMC146	14.6	8.76	●												3.05	14	14	TID*145...
DMC147	14.7	8.76	●												3.07	14	14	TID*145...
DMC148	14.8	8.76	●												3.09	14	14	TID*145...
DMC149	14.9	8.76	●												3.11	14	14	TID*145...
DMC150	15	9.44	●												3.18	15	15	TID*150...
DMC151	15.1	9.44	●												3.2	15	15	TID*150...
DMC152	15.2	9.44	●												3.22	15	15	TID*150...
DMC153	15.3	9.44	●												3.24	15	15	TID*150...
DMC154	15.4	9.44	●												3.26	15	15	TID*150...
DMC155	15.5	9.44	●												3.28	15	15	TID*150...
DMC156	15.6	9.44	●												3.3	15	15	TID*150...
DMC157	15.7	9.44	●												3.32	15	15	TID*150...
DMC158	15.8	9.44	●												3.34	15	15	TID*150...
DMC159	15.9	9.44	●												3.36	15	15	TID*150...
DMC160	16	10.07	●												3.39	16	16	TID*160...
DMC161	16.1	10.07	●												3.41	16	16	TID*160...
DMC162	16.2	10.07	●												3.43	16	16	TID*160...
DMC163	16.3	10.07	●												3.45	16	16	TID*160...
DMC164	16.4	10.07	●												3.47	16	16	TID*160...
DMC165	16.5	10.07	●												3.49	16	16	TID*160...
DMC166	16.6	10.07	●												3.51	16	16	TID*160...
DMC167	16.7	10.07	●												3.53	16	16	TID*160...
DMC168	16.8	10.07	●												3.55	16	16	TID*160...
DMC169	16.9	10.07	●												3.57	16	16	TID*160...
DMC170	17	10.68	●												3.57	17	17	TID*170...
DMC171	17.1	10.68	●												3.59	17	17	TID*170...
DMC172	17.2	10.68	●												3.61	17	17	TID*170...
DMC173	17.3	10.68	●												3.63	17	17	TID*170...
DMC174	17.4	10.68	●												3.65	17	17	TID*170...
DMC175	17.5	10.68	●												3.67	17	17	TID*170...
DMC176	17.6	10.68	●												3.69	17	17	TID*170...
DMC177	17.7	10.68	●												3.71	17	17	TID*170...
DMC178	17.8	10.68	●												3.73	17	17	TID*170...
DMC179	17.9	10.68	●												3.75	17	17	TID*170...
DMC180	18	11.35	●												3.78	18	18	TID*180...
DMC181	18.1	11.35	●												3.8	18	18	TID*180...
DMC182	18.2	11.35	●												3.82	18	18	TID*180...
DMC183	18.3	11.35	●												3.84	18	18	TID*180...
DMC184	18.4	11.35	●												3.86	18	18	TID*180...
DMC185	18.5	11.35	●												3.88	18	18	TID*180...
DMC186	18.6	11.35	●												3.9	18	18	TID*180...
DMC187	18.7	11.35	●												3.92	18	18	TID*180...
DMC188	18.8	11.35	●												3.94	18	18	TID*180...
DMC189	18.9	11.35	●												3.96	18	18	TID*180...
DMC190	19	11.91	●												3.99	19	19	TID*190...
DMC191	19.1	11.91	●												4.01	19	19	TID*190...
DMC192	19.2	11.91	●												4.03	19	19	TID*190...
DMC193	19.3	11.91	●												4.05	19	19	TID*190...
DMC194	19.4	11.91	●												4.07	19	19	TID*190...
DMC195	19.5	11.91	●												4.09	19	19	TID*190...
DMC196	19.6	11.91	●												4.11	19	19	TID*190...
DMC197	19.7	11.91	●												4.13	19	19	TID*190...
DMC198	19.8	11.91	●												4.15	19	19	TID*190...
DMC199	19.9	11.91	●												4.17	19	19	TID*190...

●: Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Cutting speed	Feed: *f* (mm/rev) DC (mm)						
		Vc (m/min)	ø6 - 7.9	ø8 - 9.9	ø10 - ø11.9	ø12 - ø13.9	ø14 - ø15.9	ø16 - ø19.9	ø20 - ø25.9
P	Low carbon steels (C < 0.3) SS400, SM490, S25C, etc. C15E4, E275A, E355D, etc.	80 - 140	0.09 - 0.13	0.12 - 0.25	0.15 - 0.28	0.18 - 0.3	0.20 - 0.35	0.25 - 0.45	0.25 - 0.45
P	High carbon steels (C > 0.3) S45C, S55C, etc. C45, C55, etc.	70 - 120	0.09 - 0.13	0.12 - 0.25	0.15 - 0.28	0.18 - 0.3	0.2 - 0.35	0.25 - 0.45	0.25 - 0.45
P	Low alloy steels SCM415, etc. 18CrMo4, etc.	70 - 120	0.08 - 0.13	0.11 - 0.25	0.14 - 0.28	0.16 - 0.32	0.18 - 0.35	0.23 - 0.4	0.25 - 0.45
P	Alloy steels SCM440, SCr420, etc. 42CrMo4, 20Cr4, etc.	40 - 90	0.08 - 0.13	0.11 - 0.25	0.14 - 0.28	0.16 - 0.32	0.18 - 0.35	0.23 - 0.4	0.25 - 0.45
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	30 - 70	0.08 - 0.1	0.1 - 0.15	0.12 - 0.18	0.14 - 0.2	0.16 - 0.24	0.16 - 0.26	0.18 - 0.3
K	Grey cast irons FC250, etc. GG25, etc.	80 - 180	0.12 - 0.18	0.15 - 0.3	0.20 - 0.35	0.25 - 0.4	0.3 - 0.45	0.35 - 0.55	0.35 - 0.6
K	Ductile cast irons FCD700, etc. GGG70, etc.	80 - 140	0.12 - 0.18	0.15 - 0.3	0.20 - 0.35	0.25 - 0.4	0.3 - 0.45	0.35 - 0.55	0.35 - 0.6
N	Aluminium alloys ADC12, etc. AlSi11Cu3, etc.	80 - 220	0.1 - 0.2	0.2 - 0.35	0.25 - 0.4	0.3 - 0.45	0.35 - 0.5	0.4 - 0.6	0.5 - 0.75
S	Titanium alloys Ti-6Al-4V, etc.	20 - 50	0.05 - 0.07	0.06 - 0.12	0.08 - 0.15	0.1 - 0.28	0.12 - 0.2	0.14 - 0.22	0.18 - 0.27
S	Nickel-based alloys	20 - 50	0.05 - 0.07	0.06 - 0.11	0.08 - 0.13	0.1 - 0.15	0.12 - 0.18	0.12 - 0.22	0.14 - 0.22
H	Hardened steel	20 - 50	0.05 - 0.07	0.06 - 0.12	0.08 - 0.15	0.1 - 0.18	0.12 - 0.2	0.14 - 0.22	0.16 - 0.25

- Cutting conditions in the above table show standard cutting conditions.
- Cutting conditions may change due to the rigidity and power of the machine and the workpiece material.
- Machined hole diameter may change depending upon the rigidity of the machine tool or cutting conditions.
- In case of L/D = 8,12 drill, the recommended range of cutting speeds and feeds is between the minimum and median values listed above.

CLAMPING KEY FOR MEASURING UN-CLAMPING TORQUE

To check drill body duration, measure un-clamping torque by using a torque-driver
Recommended value of un-clamping torque that means usable limit of a drill body shown in below table.

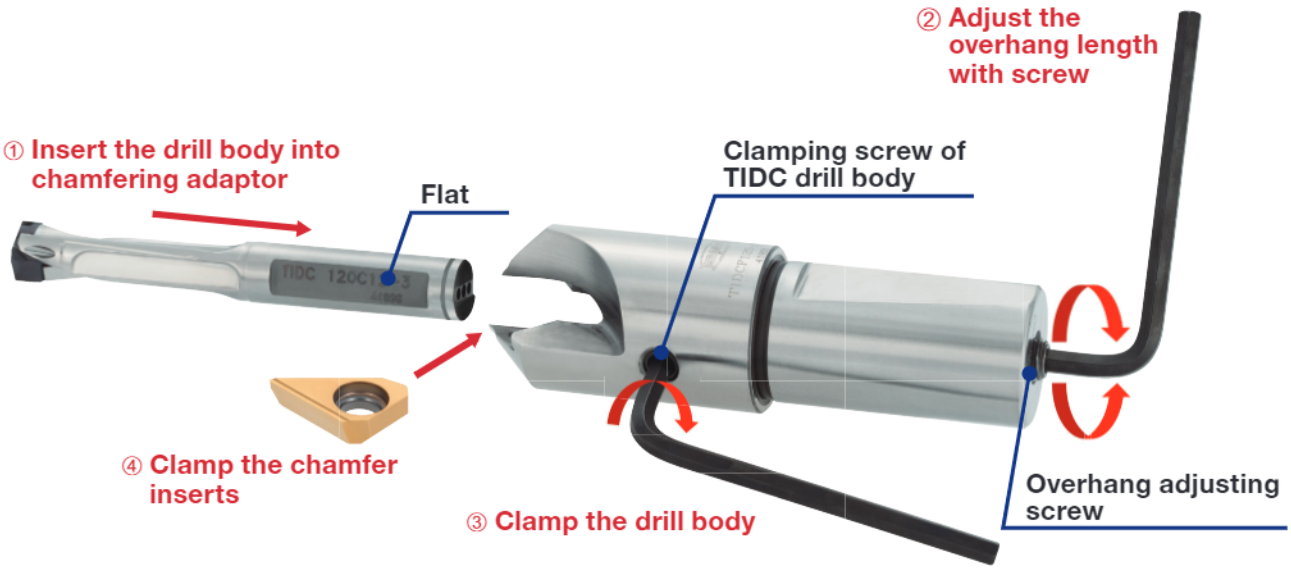
Clamping key for measuring un-clamping torque:
KHS-TID10-19.99

* The clamping key can be connect with general torque drivers.

Head Designation	Recommended value of un-clamping torque that means usable limit of a drill body (N·m)	(cN·m)
DM*100-109	0.2	20
DM*110-119	0.2	20
DM*120-129	0.25	25
DM*130-139	0.25	25
DM*140-149	0.3	30
DM*150-159	0.3	30
DM*160-169	0.35	35
DM*170-179	0.35	35
DM*180-189	0.4	40
DM*190-199	0.4	40

HOW TO MOUNT THE TIDC DRILL BODY INTO THE CHAMFER ADAPTOR

The overhang length of the drill can be changed by the adjusting screw at the bottom of the adaptor.
The rear end of the drill body must be in contact with the adjusting screw as the screw supports the drill against thrust force when drilling.



Procedure

① Place the TIDC drill body into the chamfer adaptor without chamfer inserts.
② Adjust the overhang length of the drill body with the adjusting screw at the bottom of the adaptor.
③ Adjust the position of the drill body so that the drill body is fixed at the flat and tighten the clamping screw of the drill body. This aligns the flutes of the TIDC drill body with the chamfer inserts.
④ To clamp the chamfer inserts, tighten the clamping screw of the insert while pushing the insert into the insert pocket.

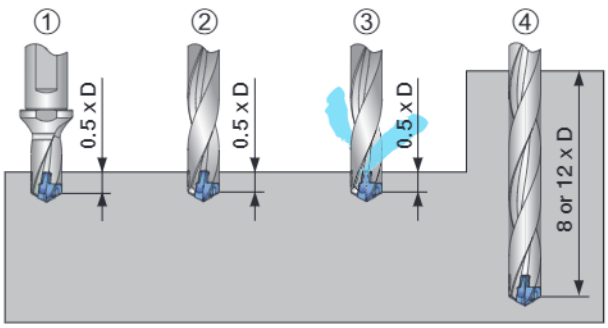
Notice
Before removing the drill body from the adaptor, chamfer inserts must be unclamped. The overhang adjusting screw can be handled from the top of the adaptor with flat blade screwdriver. In this way, the overhang length of the drill body can be adjusted after the adaptor is positioned on the drill shank.

PARTS

Clamping screw of TIDC drill body	Overhang adjusting screw	Wrench	Chamfering Insert screw	Wrench	
				Torx bit	Grip
SRM10x10DIN916	SRM10x1.5S	HW5.0	SR14-544/S ***	BT15S	SW6-SD

*** **SR14-544/S :** 5 pieces per package

CAUTION FOR USING DRILLS WITH L/D = 8 & 12



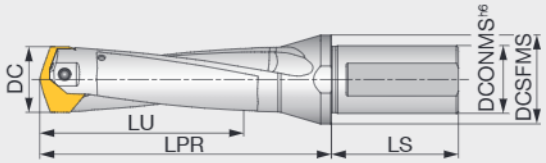
① Drill a pilot hole in the depth of 0.5 x D.
The same head diameter should be used for a pilot hole and a deep hole.
② Rotate the drill at a low speed, such as 100 min^{-1}, and feed it slowly into the pilot hole until the drill reaches several millimeters from the bottom.
③ Supply the coolant and rotate the drill at the recommended speed.
④ Drill the required depth under the recommended cutting conditions.

Note: In case of making L/D= 8 & 12 depth hole without a pilot hole, DMC type head should be used.

DRILL FORCE MEISTER

TIS L/D=3

Head indexable drill



Designation	DC	DCONMS	DCSFMS	LU	LPR	LS	Pocket size	Head
TIS260F32-3	26 - 26.9	32	40	82.7	117	60	26	SMP26*
TIS270F32-3	27 - 27.9	32	40	85.9	120	60	27	SMP27*
TIS280F32-3	28 - 28.9	32	40	89.1	128.4	60	28	SMP28*
TIS290F32-3	29 - 29.9	32	40	92.3	131.4	60	29	SMP29*
TIS300F32-3	30 - 30.9	32	42	95.5	134.7	60	30	SMP30*
TIS310F32-3	31 - 31.9	32	42	98.6	137.7	60	31	SMP31*
TIS320F40-3	32 - 32.9	40	48	101.8	143	68	32	SMP32*
TIS330F40-3	33 - 33.9	40	48	105	146	68	33	SMP33*
TIS340F40-3	34 - 34.9	40	48	108.2	149	68	34	SMP34*
TIS350F40-3	35 - 35.9	40	48	111.4	152.4	68	35	SMP35*
TIS360F40-3	36 - 36.9	40	48	114.6	155.4	68	36	SMP36*
TIS370F40-3	37 - 37.9	40	48	117.7	158.4	68	37	SMP37*
TIS380F40-3	38 - 38.9	40	50	120.9	166.9	68	38	SMP38*
TIS390F40-3	39 - 39.9	40	50	124.1	169.9	68	39	SMP39*
TIS400F40-3	40 - 41	40	50	127.3	172.9	68	40	SMP40*

Tool diameter	Hole diameter tolerance*
ø26 - ø29.9	+0.05 / 0
ø30 - ø41	+0.06 / 0

*Just for reference

SPARE PARTS



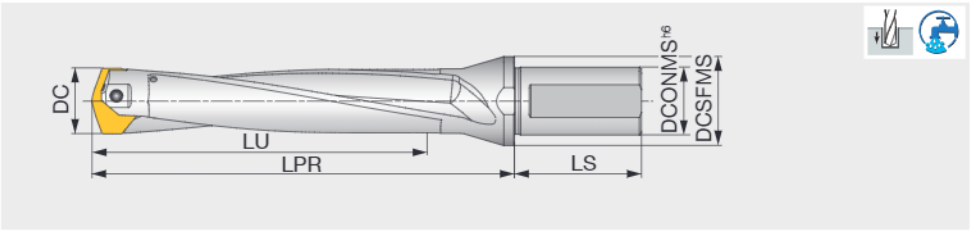
Designation	Clamping screw	Wrench	
		Torx bit	Grip
TIS260F32-*	TS50230D3	BLDT20/S7	H-TB2W
TIS270F32-*	TS50230D3	BLDT20/S7	H-TB2W
TIS280F32-*	TS50250D35	BLDT25/S7	H-TB2W
TIS290F32-*	TS50250D35	BLDT25/S7	H-TB2W
TIS300F32-*	TS60265D4	BLDT25/S7	H-TB2W
TIS310F32-*	TS60265D4	BLDT25/S7	H-TB2W
TIS320F40-*	TS60285D42	BLDT25/S7	H-TB2W
TIS330F40-*	TS60285D42	BLDT25/S7	H-TB2W
TIS340F40-*	TS60285D42	BLDT25/S7	H-TB2W
TIS350F40-*	TS60320D5	BLDT25/S7	H-TB2W
TIS360F40-*	TS60320D5	BLDT25/S7	H-TB2W
TIS370F40-*	TS60320D5	BLDT25/S7	H-TB2W
TIS380F40-*	TS80340D6	BLDT25/S7	H-TB2W
TIS390F40-*	TS80340D6	BLDT25/S7	H-TB2W
TIS400F40-*	TS80340D6	BLDT25/S7	H-TB2W

Recommended clamping torque (N·m): TS50230D3=5, TS50250D35=5.5, TS60265D4=6, TS60285D42=6, TS60320D5=6, TS80340D6=7

Reference pages: Head → J030 - J031
Standard cutting conditions → J031

TIS L/D=5

Head indexable drill



Designation	DC	DCONMS	DCSFMS	LU	LPR	LS	Pocket size	Head
TIS260F32-5	26 - 26.9	32	40	134.7	169	60	26	SMP26*
TIS270F32-5	27 - 27.9	32	40	139.9	174	60	27	SMP27*
TIS280F32-5	28 - 28.9	32	40	145.1	184.4	60	28	SMP28*
TIS290F32-5	29 - 29.9	32	40	150.3	189.4	60	29	SMP29*
TIS300F32-5	30 - 30.9	32	42	155.5	194.7	60	30	SMP30*
TIS310F32-5	31 - 31.9	32	42	160.6	199.7	60	31	SMP31*
TIS320F40-5	32 - 32.9	40	48	165.8	207	68	32	SMP32*
TIS330F40-5	33 - 33.9	40	48	171	212	68	33	SMP33*
TIS340F40-5	34 - 34.9	40	48	176.2	217	68	34	SMP34*
TIS350F40-5	35 - 35.9	40	48	181.4	222.4	68	35	SMP35*
TIS360F40-5	36 - 36.9	40	48	186.6	227.4	68	36	SMP36*
TIS370F40-5	37 - 37.9	40	48	191.7	232.4	68	37	SMP37*
TIS380F40-5	38 - 38.9	40	50	196.9	242.9	68	38	SMP38*
TIS390F40-5	39 - 39.9	40	50	202.1	247.9	68	39	SMP39*
TIS400F40-5	40 - 41	40	50	207.3	252.9	68	40	SMP40*

Tool diameter	Hole diameter tolerance*
ø26 - ø29.9	+0.08 / 0
ø30 - ø41	+0.09 / 0

*Just for reference

SPARE PARTS



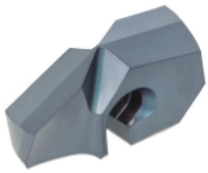
Designation	Clamping screw	Wrench	
		Torx bit	Grip
TIS260F32-*	TS50230D3	BLDT20/S7	H-TB2W
TIS270F32-*	TS50230D3	BLDT20/S7	H-TB2W
TIS280F32-*	TS50250D35	BLDT25/S7	H-TB2W
TIS290F32-*	TS50250D35	BLDT25/S7	H-TB2W
TIS300F32-*	TS60265D4	BLDT25/S7	H-TB2W
TIS310F32-*	TS60265D4	BLDT25/S7	H-TB2W
TIS320F40-*	TS60285D42	BLDT25/S7	H-TB2W
TIS330F40-*	TS60285D42	BLDT25/S7	H-TB2W
TIS340F40-*	TS60285D42	BLDT25/S7	H-TB2W
TIS350F40-*	TS60320D5	BLDT25/S7	H-TB2W
TIS360F40-*	TS60320D5	BLDT25/S7	H-TB2W
TIS370F40-*	TS60320D5	BLDT25/S7	H-TB2W
TIS380F40-*	TS80340D6	BLDT25/S7	H-TB2W
TIS390F40-*	TS80340D6	BLDT25/S7	H-TB2W
TIS400F40-*	TS80340D6	BLDT25/S7	H-TB2W

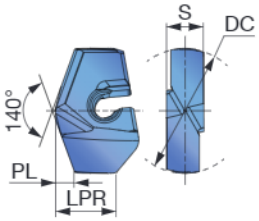
Recommended clamping torque (N·m): TS50230D3=5, TS50250D35=5.5, TS60265D4=6, TS60285D42=6, TS60320D5=6, TS80340D6=7

Reference pages: Head → J030 - J031
Standard cutting conditions → J031

DRILL HEAD

SMP





Tool diameter	Head diameter tolerance
ø26 - ø29.9	+0.014 / -0.015
ø30 - ø41	+0.014 / -0.02

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	☆
S	Superalloys	★
H	Hard materials	★

★ : First choice
☆ : Second choice

Designation	DC	S	Coated	LPR	PL	Pocket Size	Body
			AH725				
SMP260	26	7.5	●	11.6	4.73	26	TIS260F32-*
SMP261	26.1	7.5	●	11.6	4.75	26	TIS260F32-*
SMP265	26.5	7.5	●	11.6	4.82	26	TIS260F32-*
SMP267	26.7	7.5	●	11.6	4.86	26	TIS260F32-*
SMP270	27	7.5	●	11.1	4.91	27	TIS270F32-*
SMP271	27.1	7.5	●	11.1	4.93	27	TIS270F32-*
SMP272	27.2	7.5	●	11.1	4.95	27	TIS270F32-*
SMP275	27.5	7.5	●	11.1	5	27	TIS270F32-*
SMP280	28	8	●	11.7	5.1	28	TIS280F32-*
SMP281	28.1	8	●	11.7	5.11	28	TIS280F32-*
SMP285	28.5	8	●	11.7	5.19	28	TIS280F32-*
SMP286	28.6	8	●	11.7	5.2	28	TIS280F32-*
SMP290	29	8	●	11.3	5.28	29	TIS290F32-*
SMP291	29.1	8	●	11.3	5.3	29	TIS290F32-*
SMP295	29.5	8	●	11.3	5.37	29	TIS290F32-*
SMP296	29.6	8	●	11.3	5.39	29	TIS290F32-*
SMP300	30	8.5	●	14.1	5.46	30	TIS300F32-*
SMP301	30.1	8.5	●	14.1	5.48	30	TIS300F32-*
SMP302	30.2	8.5	●	14.1	5.5	30	TIS300F32-*
SMP303	30.3	8.5	●	14.1	5.51	30	TIS300F32-*
SMP305	30.5	8.5	●	14.1	5.55	30	TIS300F32-*
SMP308	30.8	8.5	●	14.1	5.61	30	TIS300F32-*
SMP310	31	8.5	●	13.7	5.64	31	TIS310F32-*
SMP311	31.1	8.5	●	13.7	5.66	31	TIS310F32-*
SMP315	31.5	8.5	●	13.7	5.73	31	TIS310F32-*
SMP318	31.8	8.5	●	13.7	5.79	31	TIS310F32-*
SMP320	32	9	●	14.5	5.82	32	TIS320F40-*
SMP321	32.1	9	●	14.5	5.84	32	TIS320F40-*
SMP325	32.5	9	●	14.5	5.91	32	TIS320F40-*
SMP328	32.8	9	●	14.5	5.97	32	TIS320F40-*
SMP330	33	9	●	14.1	6.01	33	TIS330F40-*
SMP331	33.1	9	●	14.1	6.02	33	TIS330F40-*
SMP333	33.3	9	●	14.1	6.06	33	TIS330F40-*
SMP335	33.5	9	●	14.1	6.1	33	TIS330F40-*
SMP340	34	9	●	13.7	6.19	34	TIS340F40-*
SMP341	34.1	9	●	13.7	6.21	34	TIS340F40-*
SMP345	34.5	9	●	13.7	6.28	34	TIS340F40-*
SMP349	34.9	9	●	13.7	6.35	34	TIS340F40-*
SMP350	35	10	●	16.6	6.37	35	TIS350F40-*
SMP351	35.1	10	●	16.6	6.39	35	TIS350F40-*
SMP355	35.5	10	●	16.6	6.46	35	TIS350F40-*
SMP360	36	10	●	16.1	6.55	36	TIS360F40-*
SMP361	36.1	10	●	16.1	6.57	36	TIS360F40-*
SMP365	36.5	10	●	16.1	6.64	36	TIS360F40-*
SMP366	36.6	10	●	16.1	6.66	36	TIS360F40-*
SMP370	37	10	●	15.7	6.73	37	TIS370F40-*
SMP371	37.1	10	●	15.7	6.75	37	TIS370F40-*
SMP375	37.5	10	●	15.7	6.82	37	TIS370F40-*
SMP380	38	10.5	●	17	6.92	38	TIS380F40-*
SMP381	38.1	10.5	●	17	6.93	38	TIS380F40-*
SMP385	38.5	10.5	●	17	7.01	38	TIS380F40-*
SMP388	38.8	10.5	●	17	7.06	38	TIS380F40-*
SMP390	39	10.5	●	16.6	7.1	39	TIS390F40-*

●: Line up

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	☆
S	Superalloys	★
H	Hard materials	★

★ : First choice
☆ : Second choice

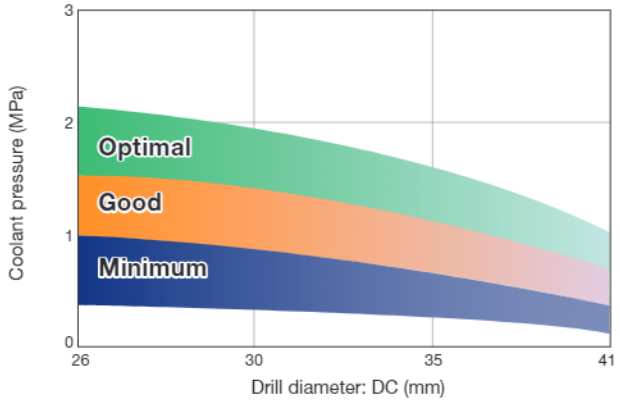
Designation	DC	S	Coated AH725	LPR	PL	Pocket Size	Body
SMP391	39.1	10.5	●	16.6	7.12	39	TIS390F40-*
SMP395	39.5	10.5	●	16.6	7.19	39	TIS390F40-*
SMP397	39.7	10.5	●	16.6	7.22	39	TIS390F40-*
SMP398	39.8	10.5	●	16.6	7.24	39	TIS390F40-*
SMP400	40	10.5	●	16.2	7.28	40	TIS400F40-*
SMP401	40.1	10.5	●	16.2	7.3	40	TIS400F40-*
SMP405	40.5	10.5	●	16.2	7.37	40	TIS400F40-*
SMP410	41	10.5	●	16.2	7.46	40	TIS380F40-*

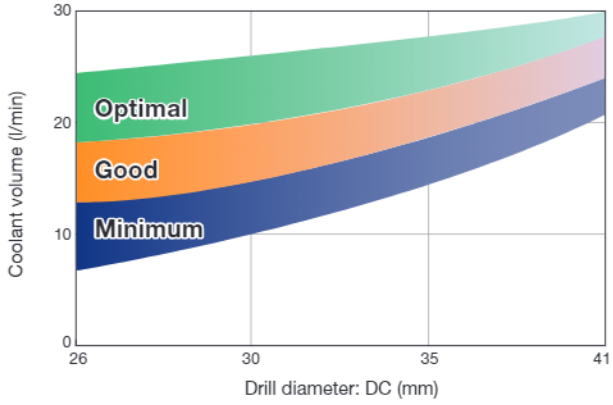
●: Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev) DC (mm) ø26 - ø29.9	ø30 - ø35.9	ø36 - ø41
P	Low carbon steels S15C, S20C, etc. C15, C20, etc.	80 - 140	0.2 - 0.5	0.2 - 0.5	0.2 - 0.55
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMoS4, etc.	80 - 130	0.2 - 0.5	0.2 - 0.5	0.2 - 0.55
	Prehardened steels NAK80, PX5, etc.	50 - 100	0.2 - 0.5	0.2 - 0.5	0.2 - 0.55
M	Stainless steels SUS304, SUS316X5, etc. CrNi18-9, X5CrNiMo17-12-2, etc.	40 - 80	0.15 - 0.3	0.15 - 0.3	0.2 - 0.35
K	Grey cast irons 250, 300, etc.	80 - 180	0.25 - 0.55	0.25 - 0.55	0.3 - 0.6
	Ductile cast irons FCD400, FCD600, etc. 400-15, 600-3, etc.	80 - 140	0.25 - 0.55	0.25 - 0.55	0.3 - 0.6
N	Non ferrous materials	100 - 200	0.4 - 0.6	0.4 - 0.6	0.5 - 0.7
S	Heat-resistant alloy Inconel718, etc.	20 - 50	0.1 - 0.2	0.1 - 0.2	0.1 - 0.25
	Titanium alloys Ti-6Al-4V, etc.	20 - 50	0.1 - 0.3	0.1 - 0.3	0.1 - 0.35
H	Hardened materials	20 - 60	0.1 - 0.2	0.1 - 0.2	0.1 - 0.25

RECOMMENDED COOLANT PRESSURE AND VOLUME

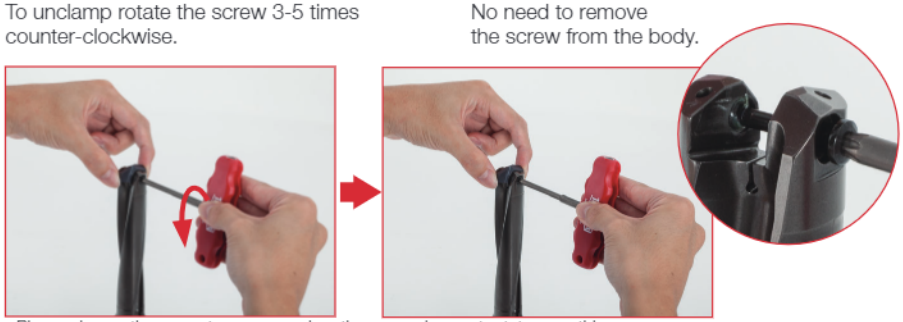




HOW TO CHANGE DRILL HEAD

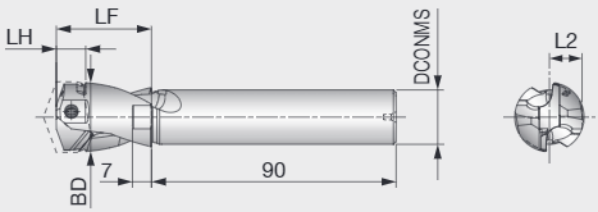
To unclamp rotate the screw 3-5 times counter-clockwise.

No need to remove the screw from the body.



- Please change the screw to new one when the screw does not rotate smoothly

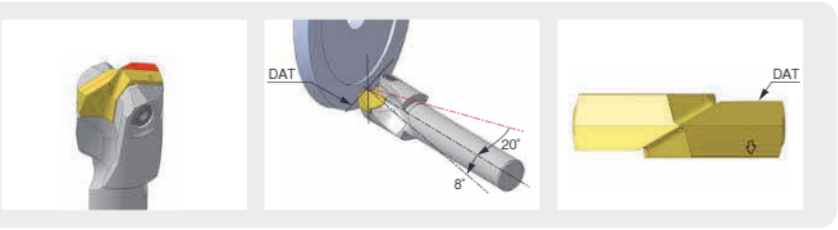
DRILL FORCE MEISTER
Regrinding holder



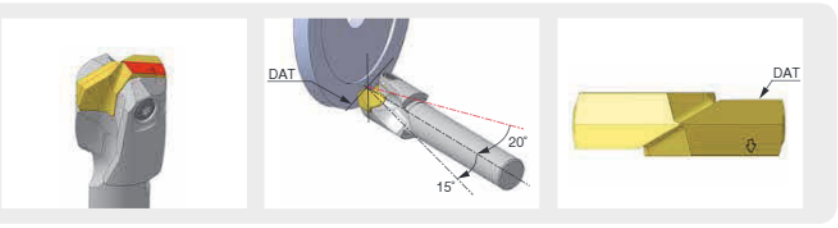
Designation	DCONMS	BD	LF	LH	L2	Head
SMP260-279-GH	20	25.5	35	10.8	12	SMP260-SMP279
SMP280-299-GH	20	27.5	35	10.8	13	SMP280-SMP299
SMP300-319-GH	20	29.5	35	13	14	SMP300-SMP319
SMP320-349-GH	20	31.5	35	13	15	SMP320-SMP349
SMP350-379-GH	20	34.5	40	14.7	16.5	SMP350-SMP379
SMP380-410-GH	20	37.5	40	15.1	18	SMP380-SMP410

① Clamping
- Assemble the drill head on the regrinding holder or shortest standard holder (3xD)
- Set-up the drill head in the machine : Total run-out must be less than 0.02 mm

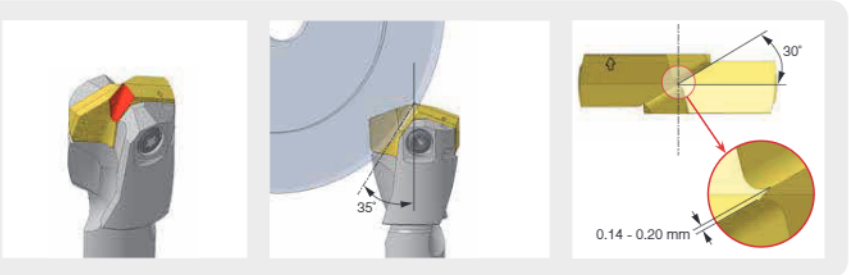
② Grinding the 1st clearance angle
- Set the drill for point angle (140°) and 1st clearance angle (8°)



③ Grinding the 2nd clearance angle
- Set the drill for 2nd clearance angle (15°)



④ Grinding the chisel (Thinning)
- Set the drill for thinning angle (35°) with reference to drill axis and angle (30°) with reference to radial axis
- Keep the chisel thickness (0.14 - 0.20) and the thinning point must be over the center line



⑤ Edge preparation (Honing)
- Cutting edges should have honing by sand or brush (0.04 - 0.06 mm)
- You can also use a diamond hand lapper for edge preparation