



DRILLING

Drilling Overview

X - Drill Inserts (SYM_X)

Square Drill Inserts (SPM_X)

Triagonal Drilling Inserts (WCM_X)

Drill Holder

Drilling Overview

Drilling Grades

Drilling Grades		P Steel					M Stainless steel					K Cast iron				
		P05	P15	P25	P35	P45	M05	M15	M25	M35	M45	K05	K15	K25	K35	K45
PVD	YG713			713					713					713		
	YG602			602					602					602		
	YG613				613					613						

YG713 P15 - P30 M15 - M30 K15 - K30 H20 - H30	PVD - TiAlN 	Drilling Grade for General Steel Application <ul style="list-style-type: none"> Multi - layer TiAlN structure realizes stronger crater and flank wear resistance Fine - grained carbide and balanced substrate
YG602 P20 - P35 M20 - M40 K20 - K40 S15 - S25	PVD - TiAlN 	Universal grade for General Drilling Application <ul style="list-style-type: none"> Ultra Dense PVD Coating with optimal thermal resistance & strength Sub - Micron substrate designed for demanding application
YG613 P30 - P50 M30 - M50	PVD - TiAlN 	Drilling Grade for Stainless Steel Application <ul style="list-style-type: none"> New coating layer with lubrication preventing built - up edge on ultra fine grain substrate with high toughness. The toughest substrate provides excellent cutting performance in stainless steel

Universal Drilling Inserts

	4 Corner	SYM ^{NEW} X Series	SYM ^{NEW} X	05, 06, 07, 08
	4 Corner	SPMX Series	SPMX	05, 06, 07, 09, 11, 14
	ISO 3 Corner	WCMX Series	WCMX	03, 04, 05, 06, 08

Drilling Chipbreakers

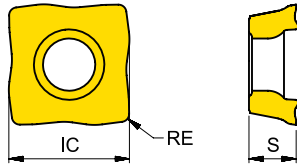
P	M	K		
	M		-ST	 <ul style="list-style-type: none"> Sharp Geometry Sticky Material, Stainless Steel
P	M	K	General Inserts (No Description)	 <ul style="list-style-type: none"> First Choice for General Application

Drilling - Inserts

X - Drill Inserts (SYMX)

Recommended Cutting Conditions : p.165

TURNING




Series	IC	S
SYMX 0502	.196	.093
SYMX 0602	.236	.093
SYMX 07T2	.275	.110
SYMX 0803	.326	.126

PARTING & GROOVING

EDP 3200..

P25 M25 K30	P20 M20 K20	P40 M40
YG602	YG713	YG613
	● 0097	● 0098
	● 0093	● 0095
	● 0099	● 0100
	● 0101	● 0102

SYMX	Designation	RE (inch)	Fn (inch/rev.)
 <p>SYMX General</p>	SYMX 050204	.016	.002~.005
	SYMX 060204	.016	.002~.005
	SYMX 07T206	.024	.002~.005
	SYMX 080306	.024	.003~.008

● : Stock item ○ : Order made item

MILLING

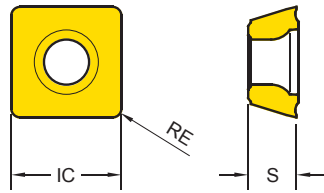
DRILLING

TECHNICAL INFORMATION

Drilling - Inserts

Square Drill Inserts (SPMX)

Recommended Cutting Conditions : p.165



Series	IC	S
SPMX 0502	.197	.094
SPMX 0602	.236	.095
SPMX 07T3	.313	.156
SPMX 0904	.386	.169
SPMX 1104	.453	.189
SPMX 1405	.563	.205



TURNING

PARTING & GROOVING

MILLING

DRILLING

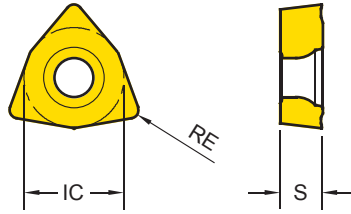
TECHNICAL INFORMATION

SPMX	Designation	RE (inch)	Fn (inch/rev.)	EDP 3200..		
				P25 M25 K30	P20 M20 K20	P40 M40
SPMX General 	SPMX 050204	.016	.003~.006	● 0005	● 0062	● 0077
	SPMX 060204	.016	.003~.006	● 0006	● 0063	● 0078
	SPMX 07T308	.031	.003~.006	● 0007	● 0064	● 0061
	SPMX 090408	.031	.003~.006	● 0008	● 0065	● 0079
	SPMX 110408	.031	.004~.007	● 0009	● 0066	● 0080
	SPMX 140512	.047	.004~.008	● 0010	● 0067	
- ST Stainless Steel 	SPMX 050204 - ST	.016	.001~.004	● 0011		● 0070
	SPMX 060204 - ST	.016	.002~.004	● 0012		● 0071
	SPMX 07T308 - ST	.031	.002~.004	● 0013		● 0068
	SPMX 090408 - ST	.031	.002~.005	● 0014		● 0072
	SPMX 110408 - ST	.031	.002~.005			● 0073
	SPMX 140512 - ST	.047	.002~.006			● 0074

● : Stock item ○ : Order made item

Triagonal Drill Inserts (WCMX)

Recommended Cutting Conditions : p.165



Series	IC	S
WCMX 0302	.219	.094
WCMX 0402	.250	.094
WCMX 0503	.313	.125
WCMX 06T3	.375	.156
WCMX 0804	.500	.187

TURNING

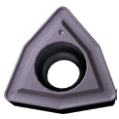
PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

EDP 3200..

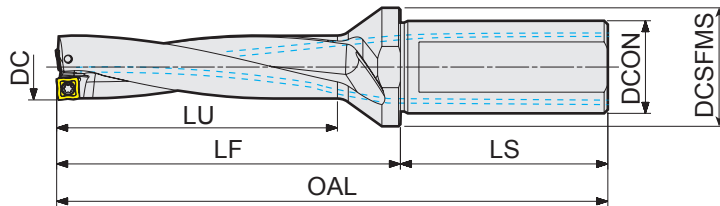
WCMX	Designation	RE (inch)	Fn (inch/rev.)	P25	P20	P40
				M25	M20	M40
General				K30	K20	M40
				YG602	YG713	YG613
	WCMX 030208	.031	.002~.005	● 0031	● 0086	
	WCMX 040208	.031	.002~.005	● 0003	● 0087	
	WCMX 050308	.031	.002~.006	● 0001	● 0088	
	WCMX 06T308	.031	.003~.006	● 0002	● 0089	
	WCMX 080412	.047	.003~.006	● 0004	● 0090	● 0091

● : Stock item ○ : Order made item

Drilling - Drill Holder

X - Drill Holder (SYM05) (DC .563 ~ .656)

NEW



☐: p. 148

Unit: inch

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
NEW SYM050204	.563	1.126	YGSY2 - 0.563S0.75 - 05I	1067	1.835	3.835	.75	1.125	2.00
		1.689	YGSY3 - 0.563S0.75 - 05I	1083	2.398	4.398			
		2.252	YGSY4 - 0.563S0.75 - 05I	1099	2.961	4.961			
		2.815	YGSY5 - 0.563S0.75 - 05I	1115	3.524	5.524			
	.591	1.182	YGSY2 - 0.591S0.75 - 05I	1068	1.935	3.935			
		1.773	YGSY3 - 0.591S0.75 - 05I	1084	2.529	4.529			
		2.364	YGSY4 - 0.591S0.75 - 05I	1100	3.123	5.123			
		2.955	YGSY5 - 0.591S0.75 - 05I	1116	3.717	5.717			
	.626	1.252	YGSY2 - 0.626S0.75 - 05I	1069	2.037	4.037			
		1.878	YGSY3 - 0.626S0.75 - 05I	1085	2.663	4.663			
		2.504	YGSY4 - 0.626S0.75 - 05I	1101	3.287	5.287			
		3.13	YGSY5 - 0.626S0.75 - 05I	1117	3.913	5.913			
.656	1.312	YGSY2 - 0.656S0.75 - 05I	1070	2.099	4.099				
	1.968	YGSY3 - 0.656S0.75 - 05I	1086	2.756	4.756				
	2.624	YGSY4 - 0.656S0.75 - 05I	1102	3.411	5.411				
	3.28	YGSY5 - 0.656S0.75 - 05I	1118	4.067	6.067				

TURNING

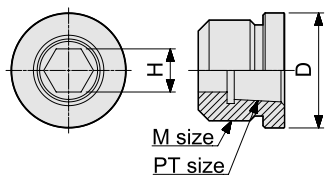
PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

PLUG (DCON0.75)



Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M12 - 1/8	38000001	0.75	.55	M12x1.0	PT 1/8	.236

* Plug for turning lathe should be ordered separately.

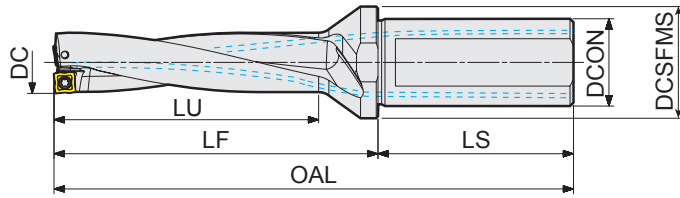
* Clamping Torque (Nm) 0.6Nm

SYM05	Screw	Wrench
Description	TP062004 - G5	TPWFTP06
EDP	18000252	18000262

Plug	DCON	0.75	1.00	1.25
	Description	PLUG M12 - 1/8	PLUG M14 - 1/8	PLUG M22 - 1/4
	EDP	38000001	38000002	38000003

X - Drill Holder (SYM06) (DC .689 ~ .813)

NEW

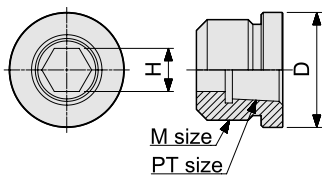


☐: p. 148

Unit: inch

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
NEW SYM06204	.689	1.378	YGSY2 - 0.689S1.00 - 06I	0870	2.165	5.165	1.00	1.375	3.00
		2.067	YGSY3 - 0.689S1.00 - 06I	0875	2.854	5.854			
		2.756	YGSY4 - 0.689S1.00 - 06I	0880	3.543	6.543			
		3.445	YGSY5 - 0.689S1.00 - 06I	0885	4.232	7.232			
	.719	1.438	YGSY2 - 0.719S1.00 - 06I	0871	2.265	5.265			
		2.157	YGSY3 - 0.719S1.00 - 06I	0876	2.984	5.984			
		2.876	YGSY4 - 0.719S1.00 - 06I	0881	3.703	6.703			
		3.595	YGSY5 - 0.719S1.00 - 06I	0886	4.422	7.422			
	.75	1.5	YGSY2 - 0.750S1.00 - 06I	0872	2.327	5.327			
		2.157	YGSY3 - 0.750S1.00 - 06I	0877	3.077	6.077			
		2.876	YGSY4 - 0.750S1.00 - 06I	0882	3.827	6.827			
		3.595	YGSY5 - 0.750S1.00 - 06I	0887	4.577	7.577			
.781	1.562	YGSY2 - 0.781S1.00 - 06I	0873	2.467	5.467				
	2.343	YGSY3 - 0.781S1.00 - 06I	0878	3.248	6.248				
	3.124	YGSY4 - 0.781S1.00 - 06I	0883	4.030	7.030				
	3.905	YGSY5 - 0.781S1.00 - 06I	0888	4.811	7.811				
.813	1.626	YGSY2 - 0.813S1.00 - 06I	0874	2.531	5.531				
	2.439	YGSY3 - 0.813S1.00 - 06I	0879	3.344	6.344				
	3.252	YGSY4 - 0.813S1.00 - 06I	0884	4.157	7.157				
	4.065	YGSY5 - 0.813S1.00 - 06I	0889	4.970	7.970				

PLUG (DCON1.0)



Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M14 - 1/8	38000002	1.0	.630	M14x1.0	PT 1/8	.236

* Plug for turning lathe should be ordered separately.

* Clamping Torque (Nm) 0.7Nm

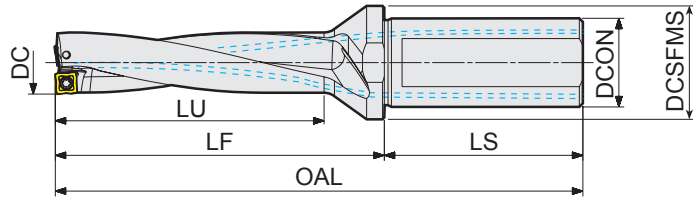
SYM06	Screw	Wrench
Description	TP072205 - GS	TPWFTP07
EDP	18000253	18000001

Plug	DCON	0.75	1.00	1.25
	Description	PLUG M12 - 1/8	PLUG M14 - 1/8	PLUG M22 - 1/4
	EDP	38000001	38000002	38000003

Drilling - Drill Holder

X - Drill Holder (SYMX07) (DC .843 ~ .906)

NEW

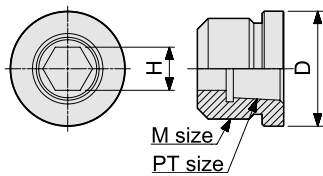


☐: p. 148

Unit: inch

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
NEW SYMX 07T206	.843	1.686	YGSY2 - 0.843S1.00 - 07I	1071	2.591	5.591	1.00	1.375	3.00
		2.529	YGSY3 - 0.843S1.00 - 07I	1087	3.435	6.435			
		3.372	YGSY4 - 0.843S1.00 - 07I	1103	4.278	7.278			
		4.215	YGSY5 - 0.843S1.00 - 07I	1119	5.120	8.120			
	.875	1.75	YGSY2 - 0.875S1.00 - 07I	1072	2.656	5.656			
		2.625	YGSY3 - 0.875S1.00 - 07I	1088	3.531	6.531			
		3.5	YGSY4 - 0.875S1.00 - 07I	1104	4.406	7.406			
		4.375	YGSY5 - 0.875S1.00 - 07I	1120	5.281	8.281			
	.906	1.812	YGSY2 - 0.906S1.00 - 07I	1073	2.678	5.678			
		2.718	YGSY3 - 0.906S1.00 - 07I	1089	3.584	6.584			
		3.624	YGSY4 - 0.906S1.00 - 07I	1105	4.490	7.490			
		4.53	YGSY5 - 0.906S1.00 - 07I	1121	5.396	8.396			

PLUG (DCON1.0)



Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M14 - 1/8	38000002	1.0	.630	M14x1.0	PT 1/8	.236

* Plug for turning lathe should be ordered separately.

* Clamping Torque (Nm) 0.7Nm

SYMX07	Screw	Wrench
Description	TP072205 - GS	TPWFTP07
EDP	18000253	18000001

Plug	DCON	0.75	1.00	1.25
	Description	PLUG M12 - 1/8	PLUG M14 - 1/8	PLUG M22 - 1/4
	EDP	38000001	38000002	38000003

TURNING

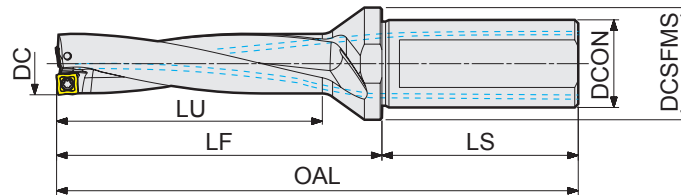
PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

X - Drill Holder (SYM08) (DC .937 ~ 1.063) NEW



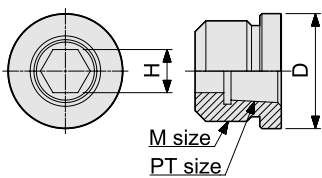
☐: p. 148

Unit: inch

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
.937	1.874		YGSY2 - 0.937S1.25 - 08I	1074	2.740	5.990	1.25	1.625	3.25
	2.811		YGSY3 - 0.937S1.25 - 08I	1090	3.677	6.927			
	3.748		YGSY4 - 0.937S1.25 - 08I	1106	4.614	7.864			
	4.685		YGSY5 - 0.937S1.25 - 08I	1122	5.551	8.801			
.969	1.938		YGSY2 - 0.969S1.25 - 08I	1075	2.804	6.054			
	2.907		YGSY3 - 0.969S1.25 - 08I	1091	3.773	7.023			
	3.876		YGSY4 - 0.969S1.25 - 08I	1107	4.742	7.992			
.984	4.845		YGSY5 - 0.969S1.25 - 08I	1123	5.711	8.961			
	1.968		YGSY2 - 0.984S1.25 - 08I	1076	2.834	6.084			
	2.952		YGSY3 - 0.984S1.25 - 08I	1092	3.818	7.068			
1.000	3.936		YGSY4 - 0.984S1.25 - 08I	1108	4.802	8.052			
	4.92		YGSY5 - 0.984S1.25 - 08I	1124	5.786	9.036			
	2.000		YGSY2 - 1.000S1.25 - 08I	1077	2.866	6.116			
1.031	3.000		YGSY3 - 1.000S1.25 - 08I	1093	3.866	7.116			
	4.000		YGSY4 - 1.000S1.25 - 08I	1109	4.866	8.116			
	5.000		YGSY5 - 1.000S1.25 - 08I	1125	5.866	9.116			
1.063	2.062		YGSY2 - 1.031S1.25 - 08I	1078	2.928	6.178			
	3.093		YGSY3 - 1.031S1.25 - 08I	1094	3.920	7.170			
	4.124		YGSY4 - 1.031S1.25 - 08I	1110	4.990	8.240			
1.063	5.155		YGSY5 - 1.031S1.25 - 08I	1126	6.021	9.271			
	2.126		YGSY2 - 1.063S1.25 - 08I	1079	2.992	6.242			
	3.189		YGSY3 - 1.063S1.25 - 08I	1095	4.094	7.344			
1.063	4.252		YGSY4 - 1.063S1.25 - 08I	1111	5.118	8.368			
	5.315		YGSY5 - 1.063S1.25 - 08I	1127	6.181	9.431			

NEW
SYM08
080306

PLUG (DCON1.25)



Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M22 - 1/4	38000003	1.25	.945	M22x1.25	PT 1/4	.394

* Plug for turning lathe should be ordered separately.

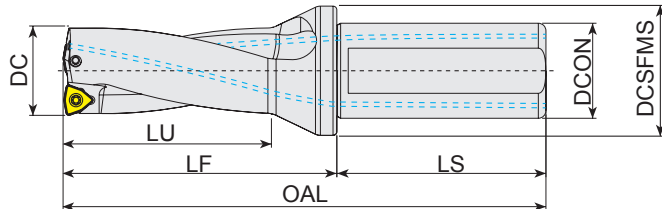
* Clamping Torque (Nm) 1.2Nm

SYM08	Screw	Wrench
Description	TP072506-GS	TPWFTP07
EDP	18000261	18000001

Plug	DCON	0.75	1.00	1.25
Description	PLUGM12 - 1/8	PLUG M14 - 1/8	PLUG M22 - 1/4	
EDP	38000001	38000002	38000003	

Drilling - Drill Holder

Trigonal Drill Holder (WCMX03) (DC .750)



△: p. 150

Unit: inch

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
WCMX 030208	.750	2.250	YGWC3 - 0750S100F2250 - 03	0811	3.110	5.315	1.000	1.260	2.205
		3.750	YGWC5 - 0750S100F3750 - 03	0823	4.606	6.811			

TURNING

PARTING & GROOVING

MILLING

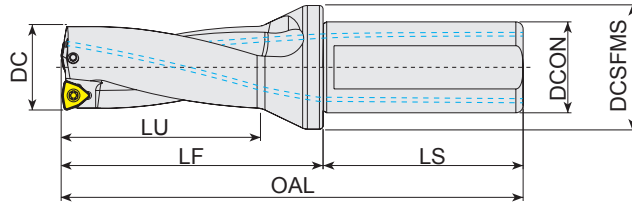
DRILLING

TECHNICAL INFORMATION

* Clamping Torque (Nm) 0.6Nm

WCMX03	Screw	Wrench
Description	T0622557	TWFT06
EDP	18000183	18000031

Trigonal Drill Holder (WCMX04) (DC .8125 ~ .875)



⊕: p. 150

Unit: inch

Series	DC	LU	Designation	EDP 370..	LF	OAL	DCON	DCSFMS	LS
WCMX 040208	.8125	2.433	YGWC3 - 0812S100F2433 - 04	0812	3.228	5.433	1.000	1.260	2.205
		4.055	YGWC5 - 0812S100F4055 - 04	0824	5.000	7.205			
	.875	2.624	YGWC3 - 0875S100F2624 - 04	0813	3.465	5.669			
		4.374	YGWC5 - 0875S100F4374 - 04	0825	5.197	7.402			

TURNING

PARTING & GROOVING

MILLING

DRILLING

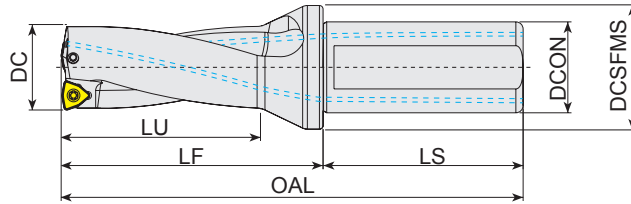
TECHNICAL INFORMATION

* Clamping Torque (Nm) 1.2Nm

WCMX04	Screw	Wrench
Description	T072565D	TWFT07
EDP	18000184	18000032

Drilling - Drill Holder

Trigonal Drill Holder (WCMX05) (DC .937 ~ 1.125)



⚠ : p. 150

Unit: inch

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
WCMX 050308	.937	2.811	YGWC3 - 0937S100F2811 - 05	0814	3.701	5.906	1.000	1.260	2.205
		4.685	YGWC5 - 0937S100F4685 - 05	0826	5.591	7.795			
	1.000	3.000	YGWC3 - 1000S100F3000 - 05	0815	3.819	6.024			
		5.000	YGWC5 - 1000S100F5000 - 05	0827	5.787	7.992			
	1.063	3.189	YGWC3 - 1063S100F3189 - 05	0816	4.055	6.260			
		5.315	YGWC5 - 1063S100F5135 - 05	0828	6.181	8.386			
	1.125	3.366	YGWC3 - 1125S100F3366 - 05	0817	4.173	6.378			
		5.610	YGWC5 - 1125S100F5610 - 05	0829	6.476	8.681			

TURNING

PARTING & GROOVING

MILLING

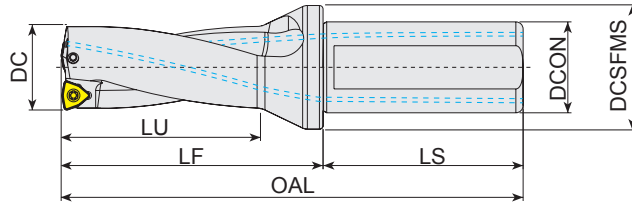
DRILLING

TECHNICAL INFORMATION

* Clamping Torque (Nm) 1.6Nm

WCMX05	Screw	Wrench
Description	T693072D	TWFT08
EDP	18000185	18000033

Trigonal Drill Holder (WCMX06) (DC 1.250 ~ 1.750)



Ⓐ: p. 150

Unit: inch

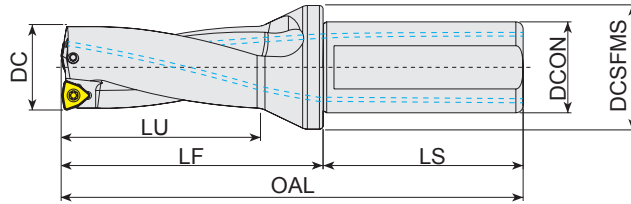
Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
WCMX 06T308	1.250	3.750	YGWC3 - 1250S125F3750 - 06	0818	4.843	7.205	1.250	1.575	2.362
		6.250	YGWC5 - 1250S125F6250 - 06	0830	7.313	9.675			
	1.375	4.122	YGWC3 - 1375S125F4122 - 06	0819	5.197	7.559			
		6.870	YGWC5 - 1375S125F6870 - 06	0831	7.953	1.315			
	1.500	4.500	YGWC3 - 1500S125F4500 - 06	0820	5.551	7.913			
		7.500	YGWC5 - 1500S125F7500 - 06	0832	8.543	1.906			
	1.750	5.250	YGWC3 - 1750S125F5250 - 06	0821	6.260	8.622			
		8.750	YGWC5 - 1750S125F8750 - 06	0833	9.969	12.331			

* Clamping Torque (Nm) 2.4Nm

WCMX06	Screw	Wrench
Description	T103588D	TWFT10
EDP	18000180	18000034

Drilling - Drill Holder

Trigonal Drill Holder (WCMX08) (DC 2.000)



⚠: p. 150

Unit: inch

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
WCMX 080412	2.000	6.000	YGWC3 - 2000S150F6000 - 08	0822	7.283	1.039	1.500	1.969	2.756
		10.000	YGWC5 - 2000S150F10000 - 08	0834	11.299	14.055			

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

* Clamping Torque (Nm) 3.0Nm

WCMX08	Screw	Wrench
Description	T154011D	TWFT15
EDP	18000186	18000035