

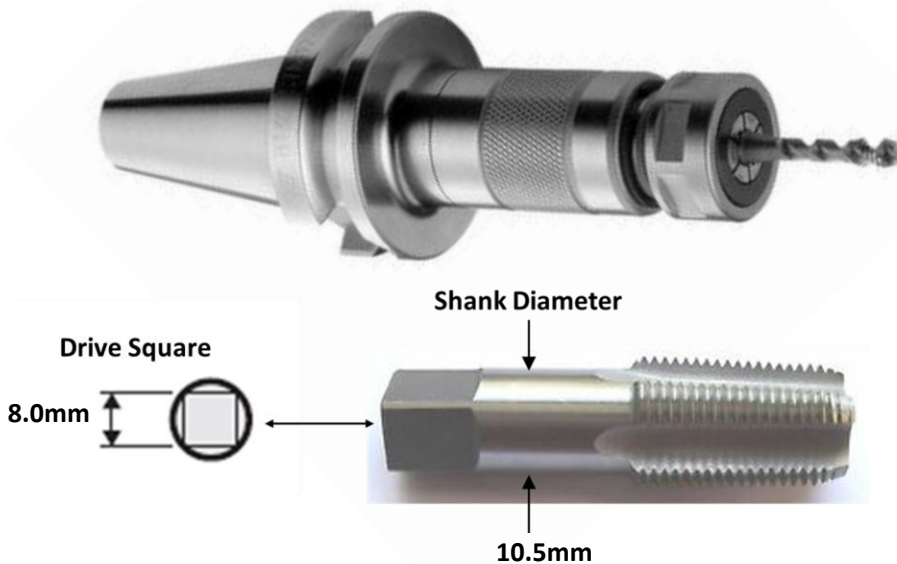


FSC-Collet and STS Preset Driver for STM Ordering Guide



How to order FSC Collet and Preset Driver for STM Holder

If you know what **STM Holder** is being used and the dimensions of the **tap**, then it is easy to find the right **FSC Collet** and **Preset Driver** to order. The dimensions of the tap are the most important pieces of information.



*In this example let's assume you have a BT30-STM18-90 Holder

*In this example let's also assume the diameter of the Tap is 10.5mm and the drive square is 8.0mm



With the information from the tap and knowing what holder you have, you can use this information to pick the right **FSC Collet** and **preset driver**

Follow from slide 7 if you only have the tap dimensions.

Example: How to choose a right size collet for the holder BT30-STM18-90

Step 1 : Find the collet series

BT30-STM18-90



Collet Series

FSC – **16 series**

Code	Model	Tap Size	L	D	Nut	kg	Collet	Preset Driver	Spanner
3910 10100075	BT30 -STM12 -75 *	Old JIS Taps M4 ~ 12	75	26	HTP-09	0.6	FSC-09	STS-12	S-1L
3910 10100090			90	26	HTP-09	0.6			
3910 10100105			105	26	HTP-09	0.7			
3910 10100120			120	26	HTP-09	0.7			
3910 10100135			135	26	HTP-09	0.8			
3910 10100150			150	26	HTP-09	0.8			
3910 10100165			165	26	HTP-09				
3910 30100090	BT30 -STM18 -90	Old JIS Taps M14 ~ 18	90	36	HTP-16	0.7	FSC-16	STS-18	S-4L
3910 30100105			105	36	HTP-16	0.8			
3910 30100120			120	36	HTP-16				
3910 30100135			135	36	HTP-16				
3910 30100150			150	36	HTP-16				
3910 30100165			165	36	HTP-16				
				U No8 ~ 7/16 PT1/8					
		OSG Synchro Taps M4 ~ 10							
		OSG Synchro Taps M12 ~ 14							

Example: How to choose a right size collet for the holder BT30-STM18-90

Step 2 : What type of coolant do you need?

Center-Thru Coolant Collet
(Tools with coolant holes)



Collet Series

FSC -16 OH

Collet-Thru Coolant Collet
(Tools without coolant holes)



Collet Series

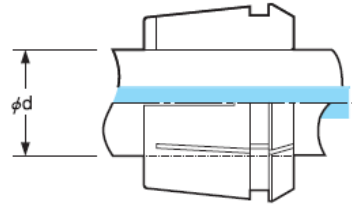
FSC -16 C

** use OH type for dry applications

Example: How to choose a right size collet for the holder BT30-STM18-90

FSC-OH

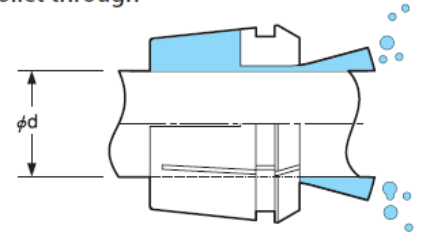
For tool with coolant hole



Tool Shank Dia.		Size	Code
ød (inch)	ød (mm)		
ø 0.141	ø 3.6	FSC-09-3.6-OH	—
ø 0.168	ø 4.3	FSC-09-4.3-OH	1334 00104309
ø 0.194	ø 5.0	FSC-09-5.0-OH	1334 00105009
ø 0.220	ø 5.6	FSC-09-5.6-OH	1334 00105609
ø 0.216	ø 5.5	FSC-09-5.5-OH	1334 00105509
ø 0.236	ø 6.0	FSC-09-6.0-OH	1334 00106009
ø 0.240	ø 6.1	FSC-09-6.1-OH	1334 00106109
ø 0.244	ø 6.2	FSC-09-6.2-OH	1334 00106209
ø 0.255	ø 6.5	FSC-09-6.5-OH	1334 00106509
ø 0.275	ø 7.0	FSC-09-7.0-OH	1334 00107009
ø 0.314	ø 8.0	FSC-09-8.0-OH	1334 00108009
ø 0.313	ø 8.0	FSC-09-8.0-OH	1334 00108009
ø 0.318	ø 8.1	FSC-09-8.1-OH	1334 00108109
ø 0.323	ø 8.3	FSC-09-8.3-OH	1334 00108309
ø 0.334	ø 8.5	FSC-09-8.5-OH	1334 00108509
ø 0.354	ø 9.0	FSC-16-9.0-OH	1334 00109016
ø 0.367	ø 9.4	FSC-16-9.4-OH	1334 00109416
ø 0.374	ø 9.5	FSC-16-9.5-OH	1334 00109516
ø 0.381	ø 9.7	FSC-16-9.7-OH	1334 00109716
ø 0.393	ø 10.0	FSC-16-10.0-OH	1334 00110016
ø 0.413	ø 10.5	FSC-16-10.5-OH	1334 00110516
ø 0.429	ø 10.9	FSC-16-10.9-OH	1334 00110916
ø 0.433	ø 11.0	FSC-16-11.0-OH	1334 00111016
ø 0.437	ø 11.1	FSC-16-11.1-OH	1334 00111116
ø 0.472	ø 12.0	FSC-16-12.0-OH	1334 00112016

FSC-C

For Collet through



Tool Shank Dia.		Size	Code
ød (inch)	ød (mm)		
ø 0.141	ø 3.6	FSC-09-3.6-C	—
ø 0.168	ø 4.3	FSC-09-4.3-C	1335 00104309
ø 0.194	ø 5.0	FSC-09-5.0-C	1335 00105009
ø 0.220	ø 5.6	FSC-09-5.6-C	1335 00105609
ø 0.216	ø 5.5	FSC-09-5.5-C	1335 00105509
ø 0.236	ø 6.0	FSC-09-6.0-C	1335 00106009
ø 0.240	ø 6.1	FSC-09-6.1-C	1335 00106109
ø 0.244	ø 6.2	FSC-09-6.2-C	1335 00106209
ø 0.255	ø 6.5	FSC-09-6.5-C	1335 00106509
ø 0.275	ø 7.0	FSC-09-7.0-C	1335 00107009
ø 0.314	ø 8.0	FSC-09-8.0-C	1335 00108009
ø 0.313	ø 8.0	FSC-09-8.0-C	1335 00108009
ø 0.318	ø 8.1	FSC-09-8.1-C	1335 00108109
ø 0.323	ø 8.3	FSC-09-8.3-C	1335 00108309
ø 0.334	ø 8.5	FSC-09-8.5-C	1335 00108509
ø 0.354	ø 9.0	FSC-16-9.0-C	1335 00109016
ø 0.367	ø 9.4	FSC-16-9.4-C	1335 00109416
ø 0.374	ø 9.5	FSC-16-9.5-C	1335 00109516
ø 0.381	ø 9.7	FSC-16-9.7-C	1335 00109716
ø 0.393	ø 10.0	FSC-16-10.0-C	1335 00110016
ø 0.413	ø 10.5	FSC-16-10.5-C	1335 00110516
ø 0.429	ø 10.9	FSC-16-10.9-C	1335 00110916
ø 0.433	ø 11.0	FSC-16-11.0-C	1335 00111016
ø 0.437	ø 11.1	FSC-16-11.1-C	1335 00111116
ø 0.472	ø 12.0	FSC-16-12.0-C	1335 00112016

Our assumed tap shank diameter is 10.5
 So you need to order based on this information:

FSC-16-10.5-OH
 FSC-16-10.5-C

Example: How to choose a right size preset driver for the holder BT30-STM18-90

Step 1 : Find the preset driver series

BT30-STM18-90



Preset Driver Series

STS – **18 series**

Code	Model	Tap Size	L	D	Nut	kg	Collet	Preset Driver	Spanner
3910 10100075	BT30 -STM12 -75 *	Old JIS Taps M4 ~ 12	75	26	HTP-09	0.6	FSC-09	STS-12	S-1L
3910 10100090			90	26	HTP-09	0.6			
3910 10100105			105	26	HTP-09	0.7			
3910 10100120			120	26	HTP-09	0.7			
3910 10100135			135	26	HTP-09	0.8			
3910 10100150			150	26	HTP-09	0.8			
3910 10100165			165	26	HTP-09				
3910 30100090	BT30 -STM18 -90	Old JIS Taps M14 ~ 18	90	36	HTP-16	0.7	FSC-16	STS-18	S-4L
3910 30100105			105	36	HTP-16	0.8			
3910 30100120			120	36	HTP-16				
3910 30100135			135	36	HTP-16				
3910 30100150			150	36	HTP-16				
3910 30100165			165	36	HTP-16				
				U No8 ~ 7/16 PT1/8					
		OSG Synchro Taps M4 ~ 10							
		OSG Synchro Taps M12 ~ 14							

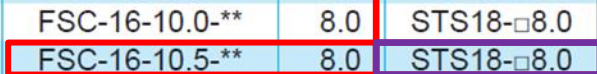
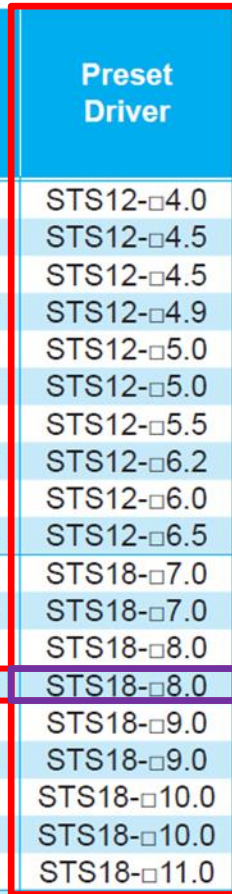
Example: How to choose a right size preset driver for the holder BT30-STM18-90

you know you need STS-18 & you know the square of the tap is 8.0mm

In the prior steps you also know you have the FSC-16-10.5-**

Holder Model	Tap Size				ød	Collet Model (OH or C)	B	Preset Driver	Tool for Changing Driver	
	Old JIS Taps			OSG Synchro-Taps						YAMAWA X Series
	Metric Thread	Unified Thread	Pipe Taper Thread							
STM12	M4~M4.5	UNo.8				5.0	FSC-09-5.0-**	4.0	STS12-□4.0	STS-R1
	M5~M5.5	UNo.10~12				5.5	FSC-09-5.5-**	4.5	STS12-□4.5	STS-R1
	M6	U1/4		M4~M6		6.0	FSC-09-6.0-**	4.5	STS12-□4.5	STS-R1
					M6	6.0	FSC-09-6.0-**	4.9	STS12-□4.9	STS-R1
		U5/16				6.1	FSC-09-6.1-**	5.0	STS12-□5.0	STS-R1
	M7~8					6.2	FSC-09-6.2-**	5.0	STS12-□5.0	STS-R1
	M9~M10	U3/8				7.0	FSC-09-7.0-**	5.5	STS12-□5.5	STS-R1
					M8	8.0	FSC-09-8.0-**	6.2	STS12-□6.2	STS-R1
	M11	U7/16	PT1/16~1/8	M8~M10		8.0	FSC-09-8.0-**	6.0	STS12-□6.0	STS-R1
M12					8.5	FSC-09-8.5-**	6.5	STS12-□6.5	STS-R1	
STM18		U1/2				9.0	FSC-16-9.0-**	7.0	STS18-□7.0	STS-R2
	M13					9.5	FSC-16-9.5-**	7.0	STS18-□7.0	STS-R2
				M12	M10	10.0	FSC-16-10.0-**	8.0	STS18-□8.0	STS-R2
	M14~15	U9/16				10.5	FSC-16-10.5-**	8.0	STS18-□8.0	STS-R2
			PT1/4			11.0	FSC-16-11.0-**	9.0	STS18-□9.0	STS-R2
		U5/8		M14	M12	12.0	FSC-16-12.0-**	9.0	STS18-□9.0	STS-R2
	M16					12.5	FSC-16-12.5-**	10.0	STS18-□10.0	STS-R2
	M17					13.0	FSC-16-13.0-**	10.0	STS18-□10.0	STS-R2
M18~M19	U3/4	PT3/8			14.0	FSC-16-14.0-**	11.0	STS18-□11.0	STS-R2	

Square size



The preset driver you need is: **STS18-□8.0**

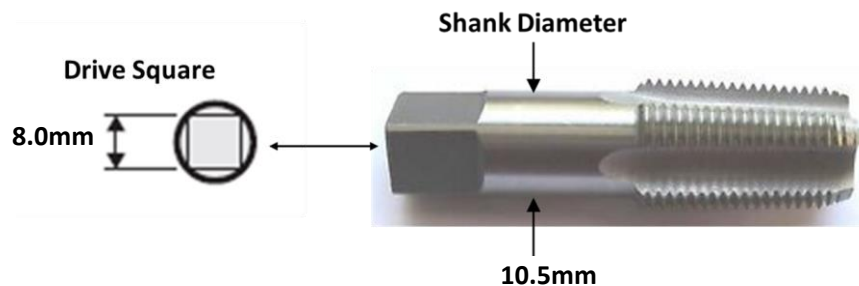
The FSC Collet you need is: **FSC-16-10.5-****

** find the full list on page 11 and 12



How to find the right Holder, collet, and preset driver for your tap.

What if you only have the tap and need to get a holder, FSC collet and preset driver? Luckily the measurements from the tap is all you need to find the other pieces of the set.

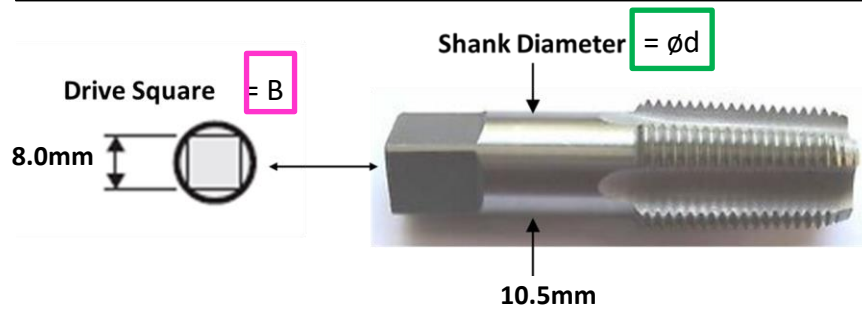


By knowing just the shank diameter and drive square measurements, you can find the rest of the missing parts.

Just like before in this example assume a 10.5mm shank diameter and an 8.0mm drive square



Example: How to find FSC Collet, Preset driver, and STM Holder for your tap

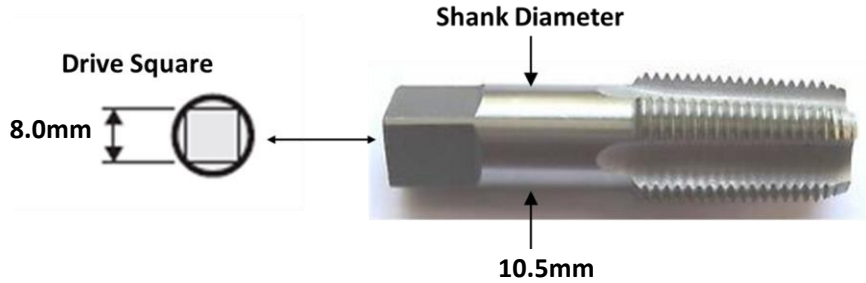


Step 1: Find where the shank diameter and drive square measurements fall on the same line

Holder Model	Tap Size			OSG Synchro-Taps	YAMAWA X Series	ød	Collet Model (OH or C)	B	Preset Driver	Tool for Changing Driver
	Old JIS Taps									
	Metric Thread	Unified Thread	Pipe Taper Thread							
STM12	M4~M4.5	UNo.8				5.0	FSC-09-5.0-**	4.0	STS12-□4.0	STS-R1
	M5~M5.5	UNo.10~12				5.5	FSC-09-5.5-**	4.5	STS12-□4.5	STS-R1
	M6	U1/4		M4~M6		6.0	FSC-09-6.0-**	4.5	STS12-□4.5	STS-R1
		U5/16			M6	6.0	FSC-09-6.0-**	4.9	STS12-□4.9	STS-R1
	M7~8					6.1	FSC-09-6.1-**	5.0	STS12-□5.0	STS-R1
	M9~M10	U3/8				6.2	FSC-09-6.2-**	5.0	STS12-□5.0	STS-R1
	M11	U7/16	PT1/16~1/8	M8~M10	M8	7.0	FSC-09-7.0-**	5.5	STS12-□5.5	STS-R1
	M12					8.0	FSC-09-8.0-**	6.2	STS12-□6.2	STS-R1
STM18		U1/2				8.0	FSC-09-8.0-**	6.0	STS12-□6.0	STS-R1
						8.5	FSC-09-8.5-**	6.5	STS12-□6.5	STS-R1
	M13					9.0	FSC-16-9.0-**	7.0	STS18-□7.0	STS-R2
						9.5	FSC-16-9.5-**	7.0	STS18-□7.0	STS-R2
	M14~15	U9/16		M12	M10	10.0	FSC-16-10.0-**	7.0	STS18-□8.0	STS-R2
			PT1/4			10.5	FSC-16-10.5-**	8.0	STS18-□8.0	STS-R2
	M16	U5/8		M14	M12	11.0	FSC-16-11.0-**	9.0	STS18-□9.0	STS-R2
	M17					12.0	FSC-16-12.0-**	9.0	STS18-□9.0	STS-R2
M18~M19	U3/4	PT3/8			12.5	FSC-16-12.5-**	10.0	STS18-□10.0	STS-R2	
					13.0	FSC-16-13.0-**	10.0	STS18-□10.0	STS-R2	
					14.0	FSC-16-14.0-**	11.0	STS18-□11.0	STS-R2	

**find the full list on page 11 and 12

Example: How to find FSC Collet, Preset driver, and STM Holder for your tap



Step 2: Find the **FSC Collet**, **Preset Driver**, and **STM holder** series information on the same line.

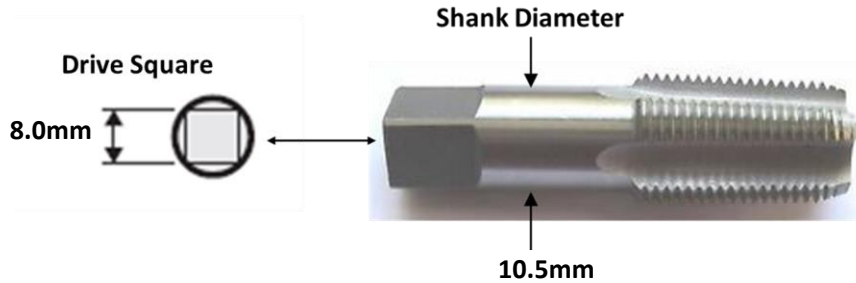
*OH for center thru coolant or dry C for Collet thru coolant

Holder Model	Tap Size				ød	Collet Model (OH or C)	B	Preset Driver	Tool for Changing Driver	
	Old JIS Taps			OSG Synchro-Taps						YAMAWA X Series
	Metric Thread	Unified Thread	Pipe Taper Thread							
STM12	M4~M4.5	UNo.8				5.0	FSC-09-5.0-**	4.0	STS12-□4.0	STS-R1
	M5~M5.5	UNo.10~12				5.5	FSC-09-5.5-**	4.5	STS12-□4.5	STS-R1
	M6	U1/4		M4~M6		6.0	FSC-09-6.0-**	4.5	STS12-□4.5	STS-R1
		U5/16			M6	6.0	FSC-09-6.0-**	4.9	STS12-□4.9	STS-R1
	M7~8					6.1	FSC-09-6.1-**	5.0	STS12-□5.0	STS-R1
	M9~M10	U3/8				6.2	FSC-09-6.2-**	5.0	STS12-□5.0	STS-R1
	M11	U7/16	PT1/16~1/8	M8~M10	M8	7.0	FSC-09-7.0-**	5.5	STS12-□5.5	STS-R1
	M12					8.0	FSC-09-8.0-**	6.2	STS12-□6.2	STS-R1
STM18		U1/2				8.0	FSC-09-8.0-**	6.0	STS12-□6.0	STS-R1
	M13			M12	M10	8.5	FSC-09-8.5-**	6.5	STS12-□6.5	STS-R1
		U1/2				9.0	FSC-16-9.0-**	7.0	STS18-□7.0	STS-R2
						9.5	FSC-16-9.5-**	7.0	STS18-□7.0	STS-R2
	M14~15	U9/16				10.0	FSC-16-10.0-**	8.0	STS18-□8.0	STS-R2
			PT1/4			10.5	FSC-16-10.5-**	8.0	STS18-□8.0	STS-R2
		U5/8		M14	M12	11.0	FSC-16-11.0-**	9.0	STS18-□9.0	STS-R2
	M16					12.0	FSC-16-12.0-**	9.0	STS18-□9.0	STS-R2
	M17					12.5	FSC-16-12.5-**	10.0	STS18-□10.0	STS-R2
	M18~M19	U3/4	PT3/8			13.0	FSC-16-13.0-**	10.0	STS18-□10.0	STS-R2
					14.0	FSC-16-14.0-**	11.0	STS18-□11.0	STS-R2	

**find the full list on page 11 and 12



Example: How to find FSC Collet, Preset driver, and STM Holder for your tap



Step 3: Find the holder that fits your Spindle and needs. you'll assume BT30 in the example.

STM18

FSC Collet:
FSC-16-10.5-OH or C

Preset driver:
STS18□8.0

Code	Model	Tap Size	L	D	Nut	kg	Collet	Preset Driver	Spanner
3910 00100075	BT30 -STM8	-75 *	75	21	KDP-1414		FDC-07	STS-8	Flat 17mm width
3910 00100090		-90	90	21	KDP-1414				
3910 00100105		-105	105	21	KDP-1414				
3910 00100120		-120	120	21	KDP-1414				
3910 00100135		-135	135	21	KDP-1414				
3910 00100150		-150	150	21	KDP-1414				
3910 10100075	BT30 -STM12	-75 *	75	26	HTP-09	0.6	FSC-09	STS-12	S-1L
3910 10100090		-90	90	26	HTP-09	0.6			
3910 10100105		-105	105	26	HTP-09	0.7			
3910 10100120		-120	120	26	HTP-09	0.7			
3910 10100135		-135	135	26	HTP-09	0.8			
3910 10100150		-150	150	26	HTP-09	0.8			
3910 10100165	-165	165	26	HTP-09					
3910 30100090	BT30 -STM18	-90	90	36	HTP-16	0.7	FSC-16	STS-18	S-4L
3910 30100105		-105	105	36	HTP-16	0.8			
3910 30100120		-120	120	36	HTP-16				
3910 30100135		-135	135	36	HTP-16				
3910 30100150		-150	150	36	HTP-16				
3910 30100165		-165	165	36	HTP-16				

STM Holder: BT30-STM18-XX



Guides for finding FSC Collet and Preset Driver

ANSI

Holder Model	Tap Size (ANSI)	ød (inch)	ød (mm)	Collet Model (OH or C)	B (inch)	B (mm)	Preset Driver
STM8	#0-6	0.141	3.581	FDC-03607**	0.110	2.794	STS8- □ 2.8
	#8	0.168	4.267	FDC-04307**	0.131	3.327	STS8- □ 3.4
	#10	0.194	4.927	FDC-05007**	0.152	3.860	STS8- □ 4.0
	#12	0.220	5.58	FDC-05607**	0.165	4.191	STS8- □ 4.2
	1/4	0.255	6.477	FDC-06507**	0.191	4.851	STS8- □ 4.9
STM12	#0-6	0.141	3.581	FSC-09-3.6**	0.110	2.794	STS12- □ 2.8
	#8	0.168	4.267	FSC-09-4.3**	0.131	3.327	STS12- □ 3.4
	#10	0.194	4.927	FSC-09-5.0**	0.152	3.860	STS12- □ 4.0
	#12	0.220	5.588	FSC-09-5.6**	0.165	4.191	STS12- □ 4.2
	1/4	0.255	6.477	FSC-09-6.5**	0.191	4.851	STS12- □ 4.9
	1/8SPT	0.313	7.950	FSC-09-8.0**	0.234	5.943	STS12- □ 6.0
	5/16	0.318	8.077	FSC-09-8.1**	0.238	6.045	STS12- □ 6.1
	7/16	0.323	8.204	FSC-09-8.3**	0.242	6.146	STS12- □ 6.2
STM18	1/2	0.367	9.321	FSC-16-9.4**	0.275	6.985	STS18- □ 7.0
	3/8	0.381	9.677	FSC-16-9.7**	0.286	7.264	STS18- □ 7.3
	9/16	0.429	10.896	FSC-16-10.9**	0.322	8.178	STS18- □ 8.2
	1/8LPT	0.437	11.099	FSC-16-11.1**	0.328	8.331	STS18- □ 8.4
	5/8	0.480	12.192	FSC-16-12.2**	0.360	9.144	STS18- □ 9.2
	11/16	0.542	13.766	FSC-16-13.8**	0.406	10.312	STS18- □ 10.4
	1/4PT	0.562	14.274	FSC-16-14.3**	0.421	10.693	STS18- □ 10.7
STM30	3/4	0.590	14.986	FSC-22-15.0**	0.442	11.226	STS30- □ 11.3
	13/16	0.652	16.560	FSC-22-16.6**	0.489	12.420	STS30- □ 12.5
	7/8	0.697	17.703	FSC-22-17.8**	0.523	13.284	STS30- □ 13.3
	3/8PT	0.700	17.780	FSC-22-17.8**	0.531	13.487	STS30- □ 13.5
	1	0.800	20.320	FSC-22-20.4**	0.600	15.24	STS30- □ 15.3



Guides for finding FSC Collet and Preset Driver

JIS and DIN

Holder Model	Tap Size				ød	Collet Model (OH or C)	B	Preset Driver	Tool for Changing Driver	
	Old JIS Taps			DIN 371						DIN 376
	Metric Thread	Unified Thread	Pipe Taper Thread							
STM8	M4~M4.5	UNo.8				5.0	FDC-05007-**	4.0	STS8-□4.0	STS-R0
	M5~M5.5	UNo.10~12				5.5	FDC-05507-**	4.5	STS8-□4.5	STS-R0
	M6	U1/4				6.0	FDC-06007-**	4.5	STS8-□4.5	STS-R0
				M5, M6	M8x1.25	6.0	FDC-06007-**	4.9	STS8-□4.9	STS-R0
		U5/16				6.1	FDC-06107-**	5.0	STS8-□5.0	STS-R0
	M7~8					6.2	FDC-06207-**	5.0	STS8-□5.0	STS-R0
STM12	M4~M4.5	UNo.8				5.0	FSC-09-5.0-**	4.0	STS12-□4.0	STS-R1
	M5~M5.5	UNo.10~12				5.5	FSC-09-5.5-**	4.5	STS12-□4.5	STS-R1
	M6	U1/4				6.0	FSC-09-6.0-**	4.5	STS12-□4.5	STS-R1
				M5, M6	M8x1.25	6.0	FSC-09-6.0-**	4.9	STS12-□4.9	STS-R1
		U5/16				6.1	FSC-09-6.1-**	5.0	STS12-□5.0	STS-R1
	M7~8					6.2	FSC-09-6.2-**	5.0	STS12-□5.0	STS-R1
	M9~M10	U3/8		M7 M8	M10	7.0	FSC-09-7.0-**	5.5	STS12-□5.5	STS-R1
						8.0	FSC-09-8.0-**	6.2	STS12-□6.2	STS-R1
	M11	U7/16	PT1/16~1/8			8.0	FSC-09-8.0-**	6.0	STS12-□6.0	STS-R1
M12					8.5	FSC-09-8.5-**	6.5	STS12-□6.5	STS-R1	
STM18		U1/2		M9	M12	9.0	FSC-16-9.0-**	7.0	STS18-□7.0	STS-R2
	M13					9.5	FSC-16-9.5-**	7.0	STS18-□7.0	STS-R2
				M10x1.5		10.0	FSC-16-10.0-**	8.0	STS18-□8.0	STS-R2
	M14~15	U9/16				10.5	FSC-16-10.5-**	8.0	STS18-□8.0	STS-R2
			PT1/4		M14	11.0	FSC-16-11.0-**	9.0	STS18-□9.0	STS-R2
		U5/8			M16	12.0	FSC-16-12.0-**	9.0	STS18-□9.0	STS-R2
	M16					12.5	FSC-16-12.5-**	10.0	STS18-□10.0	STS-R2
	M17					13.0	FSC-16-13.0-**	10.0	STS18-□10.0	STS-R2
M18~M19	U3/4	PT3/8		M18	14.0	FSC-16-14.0-**	11.0	STS18-□11.0	STS-R2	
STM30	M20					15.0	FSC-22-15.0-**	12.0	STS30-□12.0	STS-R2
	M21				M20	16.0	FSC-22-16.0-**	12.0	STS30-□12.0	STS-R2
	M22	U7/8				17.0	FSC-22-17.0-**	13.0	STS30-□13.0	STS-R2
	M23		PT1/2			18.0	FSC-22-18.0-**	14.0	STS30-□14.0	STS-R2
	M24~M25		PT5/8			19.0	FSC-22-19.0-**	15.0	STS30-□15.0	STS-R2
	M26~M27	U1				20.0	FSC-22-20.0-**	15.0	STS30-□15.0	STS-R2
	M28					21.0	FSC-22-21.0-**	17.0	STS30-□17.0	STS-R2
		U1-1/8				22.0	FSC-22-22.0-**	17.0	STS30-□17.0	STS-R2
M30		PT3/4			23.0	FSC-22-23.0-**	17.0	STS30-□17.0	STS-R2	