



# TOOL FLO



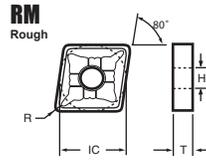
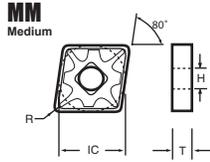
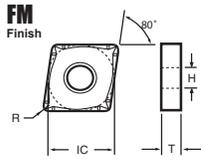
# TURNING

# TURNING



## CNMG

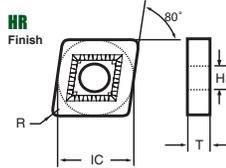
### 80° General Purpose



ANSI Description	ISO Description	EDP Code	IC	R	T	H	AGS50	AGS54	AS20	APS35
CNMG-322 MM	CNMG-090308 MM	JBMGG2MM	.375	.031	.125	.150	●	●		
CNMG-431 FM	CNMG-120404 FM	JBMGJ1FM	.500	.016	.187	.203	●	●		●
CNMG-431 MM	CNMG-120404 MM	JBMGJ1MM	.500	.016	.187	.203	●	●		
CNMG-432 FM	CNMG-120408 FM	JBMGJ2FM	.500	.031	.187	.203	●	●		●
CNMG-432 MM	CNMG-120408 MM	JBMGJ2MM	.500	.031	.187	.203	●	●		
CNMG-432 RM	CNMG-120408 RM	JBMGJ2RM	.500	.031	.187	.203	●	●	●	●
CNMG-433 MM	CNMG-120412 MM	JBMGJ3MM	.500	.047	.187	.203	●	●		
CNMG-433 RM	CNMG-120412 RM	JBMGJ3RM	.500	.047	.187	.203	●	●	●	●
CNMG-543 RM	CNMG-160612 RM	JBMG3RM	.625	.047	.250	.253	●	●		
CNMG-643 RM	CNMG-190612 RM	JBMGR3RM	.750	.047	.250	.313	●	●		
CNMG-644 RM	CNMG-190616 RM	JBMGR4RM	.750	.063	.250	.313	●	●		

## CNMM

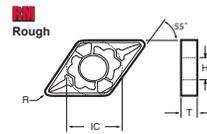
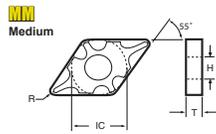
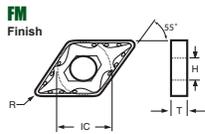
### 80° Roughing



ANSI Description	ISO Description	EDP Code	IC	R	T	H	AGS50	AGS54	AS20	APS35
CNMM-432 HR	CNMM-120408 HR	JBMMJ2HR	.500	.031	.187	.203	●	●		
CNMM-433 HR	CNMM-120412 HR	JBMMJ3HR	.500	.047	.187	.203	●	●		
CNMM-543 HR	CNMM-160612 HR	JBMMO3HR	.625	.047	.250	.253	●	●		
CNMM-644 HR	CNMM-090616 HR	JBMMR4HR	.750	.063	.250	.313	●	●		

## DNMG

### 55° General Purpose



ANSI Description	ISO Description	EDP Code	IC	R	T	H	AGS50	AGS54	AS20	APS35
DNMG-331 MM	DNMG-110404 MM	JEMGG1MM	.375	.016	.187	.150				
DNMG-332 MM	DNMG-110408 MNS	JEMGG2MM	.375	.031	.187	.150				
DNMG-431 FM	DNMG-150404 FM	JEMGJ1FM	.500	.016	.187	.203	●	●		
DNMG-431 MM	DNMG-150404 MM	JEMGJ1MM	.500	.016	.187	.203	●	●		
DNMG-432 FM	DNMG-150408 FM	JEMGJ2FM	.500	.031	.187	.203	●	●		
DNMG-432 MM	DNMG-150408 MM	JEMGJ2MM	.500	.031	.187	.203	●	●		
DNMG-432 RM	DNMG-150408 RM	JEMGJ2RM	.500	.031	.187	.203	●	●	●	●
DNMG-433 MM	DNMG-150412 MM	JEMGJ3MM	.500	.047	.187	.203	●	●		
DNMG-433 RM	DNMG-150412 RM	JEMGJ3RM	.500	.047	.187	.203	●	●	●	●
DNMG-441 FM	DNMG-150604 FM	JEMGN1FM	.500	.016	.250	.203	●	●		
DNMG-442 FM	DNMG-150608 FM	JEMGN2FM	.500	.031	.250	.203	●	●		
DNMG-442 MM	DNMG-150608 MM	JEMGN2MM	.500	.031	.250	.203	●	●		
DNMG-442 RM	DNMG-150608 RM	JEMGN2RM	.500	.031	.250	.203	●	●	●	●
DNMG-443 MM	DNMG-150612 MM	JEMGN2MM	.500	.047	.250	.203				
DNMG-443 RM	DNMG-150612 RM	JEMGN3RM	.500	.047	.250	.203				
DNMG-444 RM	DNMG-150616 RM	JEMGN3RM	.500	.063	.250	.203				

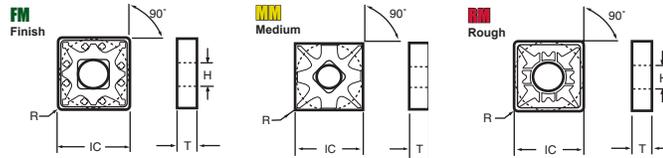
In an effort to improve our stock standard grade offering, there are periodic changes. Please see current price list for up to date grade offering.



# TURNING

## SNMG

90° General Purpose

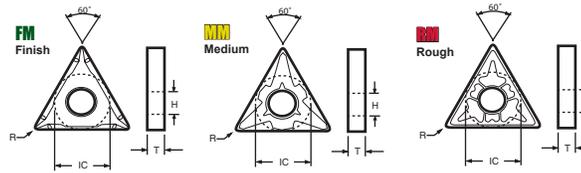


ANSI Description	ISO Description	EDP Code	IC	R	T	H	AGS50	AGS54	AS20	APS35
SNMG-431 FM	SNMG-120404 FM	JNMGJ1FM	.500	.016	.187	.203	●	●	●	●
SNMG-432 FM	SNMG-120408 FM	JNMGJ2FM	.500	.031	.187	.203	●	●	●	●
SNMG-432 MM	SNMG-120408 MM	JNMGJ2MM	.500	.031	.187	.203	●	●	●	●
SNMG-432 RM	SNMG-120408 RM	JNMGJ2RM	.500	.031	.187	.203	●	●	●	●
SNMG-433 RM	SNMG-120412 RM	JNMGJ3RM	.500	.047	.187	.203	●	●	●	●

Steel grades	Cast iron grades	Stainless/Exotic
AGS50	AS20	APS35
AGS54		

## TNMG

60° General Purpose

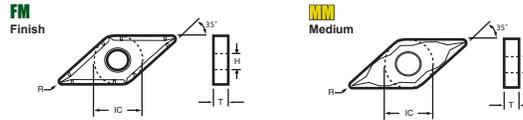


ANSI Description	ISO Description	EDP Code	IC	R	T	H	AGS50	AGS54	AS20	APS35
TNMG-331 FM	TNMG-160404 MNS	JTMGH1MNS	.375	.016	.187	.150	●	●	●	●
TNMG-331 MM	TNMG-160408 FNC	JTMGH2FNC	.375	.031	.187	.150	●	●	●	●
TNMG-332 FM	TNMG-160408 FNS	JTMGH2FNS	.375	.031	.187	.150	●	●	●	●
TNMG-332 MM	TNMG-160408 MNS	JTMGH2MNS	.375	.031	.187	.150	●	●	●	●
TNMG-332 RM	TNMG-160408 RNS	JTMGH2RNS	.375	.031	.187	.150	●	●	●	●
TNMG-333 MM	TNMG-160412 MNS	JTMGH3MNS	.375	.047	.187	.150	●	●	●	●
TNMG-333 RM	TNMG-160412 RNS	JTMGH3RNS	.375	.047	.187	.150	●	●	●	●

Steel grades	Cast iron grades	Stainless/Exotic
AGS50	AS20	APS35
AGS54		

## VNMG

35° General Purpose

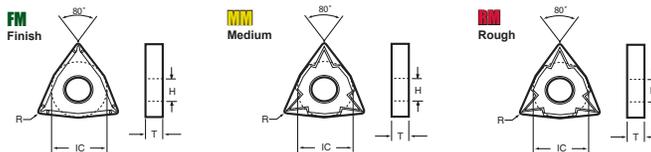


ANSI Description	ISO Description	EDP Code	IC	R	T	H	AGS50	AGS54	AS20	APS35
VNMG-331 FM	VNMG-160404 FM	JXMGH1FM	.375	.016	.187	.150	●	●	●	●
VNMG-331 MM	VNMG-160404 MM	JXMGH1MM	.375	.016	.187	.150	●	●	●	●

Steel grades	Cast iron grades	Stainless/Exotic
AGS50	AS20	APS35
AGS54		

## WNMG

80° General Purpose



ANSI Description	ISO Description	EDP Code	IC	R	T	H	AGS50	AGS54	AS20	APS35
WNMG-332 MM	WNMG-060408 MM	JZMAH2MM	.375	.031	.187	.150	●	●	●	●
WNMG-431 FM	WNMG-080404 FM	JZMAJ1FM	.500	.016	.187	.203	●	●	●	●
WNMG-431 MM	WNMG-080404 MM	JZMAJ1MM	.500	.016	.187	.203	●	●	●	●
WNMG-432 FM	WNMG-080408 FM	JZMAJ2FM	.500	.031	.187	.203	●	●	●	●
WNMG-432 MM	WNMG-080408 MM	JZMAJ2MM	.500	.031	.187	.203	●	●	●	●
WNMG-432 RM	WNMG-080408 RM	JZMAJ2RM	.500	.031	.187	.203	●	●	●	●
WNMG-433 MM	WNMG-080412 MM	JZMAJ3MM	.500	.047	.187	.203	●	●	●	●
WNMG-433 RM	WNMG-080412 RM	JZMAJ3RM	.500	.047	.187	.203	●	●	●	●

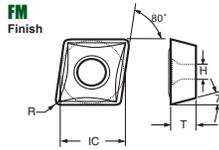
Steel grades	Cast iron grades	Stainless/Exotic
AGS50	AS20	APS35
AGS54		

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# TURNING



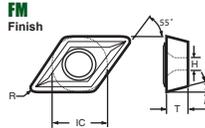
## CCMT 80° Screwdown



ANSI Description	ISO Description	EDP Code	IC	R	T	H	AGS50	AGS54	AS20	APS35
CCMT-21.51 FM	CCMT-060204 FM	JAMTD1FM	.250	.016	.094	.114				●
CCMT-32.51 FM	CCMT-09T304 FM	JAMTG1FM	.375	.016	.156	.177				●
CCMT-32.52 FM	CCMT-09T308 FM	JAMTG2FM	.375	.031	.156	.177				●
CCMT-431 FM	CCMT-120404 FM	JAMTJ1FM	.500	.016	.187	.203				●
CCMT-432 FM	CCMT-120408 FM	JAMTJ2FM	.500	.031	.187	.203				●

Steel grades	Steel grades	Cast iron grades	Stainless/Exotic
AGS50	AGS54	AS20	APS35

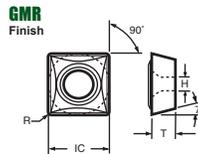
## DCMT 55° Screwdown



ANSI Description	ISO Description	EDP Code	IC	R	T	H	AGS50	AGS54	AS20	APS35
DCMT-21.51 FM	DCMT-070204 FM	JDMTD1FM	.250	.016	.094	.114		●	●	
DCMT-21.52 FM	DCMT-070208 FM	JDMTD2FM	.250	.031	.094	.114		●	●	
DCMT-32.51 FM	DCMT-11T302 FM	JDMTG0FM	.375	.016	.156	.177		●	●	
DCMT-32.52 FM	DCMT-11T304 FM	JDMTG2FM	.375	.031	.156	.177		●	●	

Steel grades	Steel grades	Cast iron grades	Stainless/Exotic
AGS50	AGS54	AS20	APS35

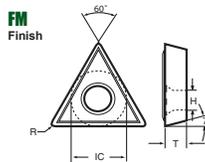
## SCMT 90° Screwdown



ANSI Description	ISO Description	EDP Code	IC	R	T	H	AGS50	AGS54	AS20	APS35
SCMT-32.51 GMR	SCMT-09T304 GMR	JLMTG1GMR	.375	.016	.156	.117	●			

Steel grades	Steel grades	Cast iron grades	Stainless/Exotic
AGS50	AGS54	AS20	APS35

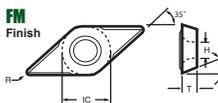
## TCMT 60° Screwdown



ANSI Description	ISO Description	EDP Code	IC	R	T	H	AGS50	AGS54	AS20	APS35
TCMT-21.51 FM	TCMT-110204 FM	JQMTD1FM	.250	.016	.094	.114	●		●	
TCMT-21.52 FM	TCMT-110208 FM	JQMTD2FM	.250	.031	.094	.114				
TCMT-32.51 FM	TCMT-16T304 FM	JQMTG1FM	.375	.016	.156	.177	●			
TCMT-32.52 FM	TCMT-16T308 FM	JQMTG2FM	.375	.031	.156	.177	●			

Steel grades	Steel grades	Cast iron grades	Stainless/Exotic
AGS50	AGS54	AS20	APS35

## VCMT 35° Screwdown



ANSI Description	ISO Description	EDP Code	IC	R	T	H	AGS50	AGS54	AS20	APS35
VCMT-331 FM	VCMT-160404 FM	JWMTH1FM	.375	.016	.187	.173	●	●		
VCMT-332 FM	VCMT-160408 FM	JWMTH2FM	.375	.031	.187	.173	●	●		

Steel grades	Steel grades	Cast iron grades	Stainless/Exotic
AGS50	AGS54	AS20	APS35

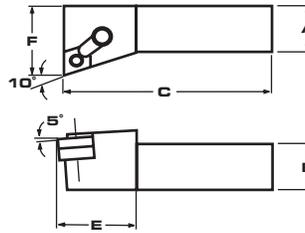
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# TURNING

## MCFNL/R

10° Holder for 80° Diamond



RH SHOWN

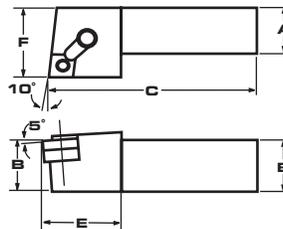
Most holders available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MCFNR-164D	9T2521656D	CN_-43	1.000	1.000	6.000	1.250	1.250	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCFNL-164D	9T2501656D	CN_-43	1.000	1.000	6.000	1.250	1.250	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCFNR-165D	9T2521664D	CN_-54	1.000	1.000	6.000	1.380	1.250	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCFNL-165D	9T2501664D	CN_-54	1.000	1.000	6.000	1.380	1.250	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCFNR-205D	9T2522064D	CN_-54	1.250	1.250	6.000	1.380	1.500	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCFNL-205D	9T2502064D	CN_-54	1.250	1.250	6.000	1.380	1.500	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCFNR-166D	9T2521672D	CN_-64	1.000	1.000	6.000	1.500	1.250	ICSN-633	NL-68	CL-9	XNS-510	S-68	
MCFNL-166D	9T2501672D	CN_-64	1.000	1.000	6.000	1.500	1.250	ICSN-633	NL-68	CL-9	XNS-510	S-68	
MCFNR-206D	9T2522072D	CN_-64	1.250	1.250	6.000	1.500	1.500	ICSN-633	NL-68	CL-9	XNS-510	S-68	
MCFNL-206D	9T2502072D	CN_-64	1.250	1.250	6.000	1.500	1.500	ICSN-633	NL-68	CL-9	XNS-510	S-68	

## MCGNL/R

10° Holder for 80° Diamond



RH SHOWN

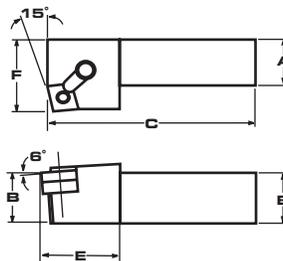
Most holders available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MCGNR-164D	9T2581656D	CN_-43	1.000	1.000	6.000	1.250	1.250	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCGNL-164D	9T2561656D	CN_-43	1.000	1.000	6.000	1.250	1.250	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCGNR-165D	9T2581664D	CN_-54	1.000	1.000	6.000	1.380	1.250	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCGNL-165D	9T2561664D	CN_-54	1.000	1.000	6.000	1.380	1.250	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCGNR-205D	9T2582064D	CN_-54	1.250	1.250	6.000	1.380	1.500	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCGNL-205D	9T2562064D	CN_-54	1.250	1.250	6.000	1.380	1.500	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCGNR-166D	9T2581672D	CN_-64	1.000	1.000	6.000	1.500	1.250	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCGNL-166D	9T2561672D	CN_-64	1.000	1.000	6.000	1.500	1.250	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCGNR-206D	9T2582072D	CN_-64	1.250	1.250	6.000	1.500	1.500	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCGNL-206D	9T2562072D	CN_-64	1.250	1.250	6.000	1.500	1.500	ICSN-633	NL-68	CL-12	XNS-510	S-68	

## MCKNL/R

15° Holder for 80° Diamond



RH SHOWN

Most holders available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MCKNR-124B	9T2641256B	CN_-43	0.750	0.750	4.500	1.210	1.000	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCKNL-124B	9T2621256B	CN_-43	0.750	0.750	4.500	1.210	1.000	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCKNR-164D	9T2641656D	CN_-43	1.000	1.000	6.000	1.250	1.250	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCKNL-164D	9T2621656D	CN_-43	1.000	1.000	6.000	1.250	1.250	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCKNR-204D	9T2642056D	CN_-43	1.250	1.250	6.000	1.250	1.500	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCKNL-204D	9T2622056D	CN_-43	1.250	1.250	6.000	1.250	1.500	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCKNR-165D	9T2641664D	CN_-54	1.000	1.000	6.000	1.500	1.250	ICSN-533	NL-58	CL-9	XNS-58	S-58	
MCKNL-165D	9T2621664D	CN_-54	1.000	1.000	6.000	1.500	1.250	ICSN-533	NL-58	CL-9	XNS-58	S-58	
MCKNR-205D	9T2642064D	CN_-54	1.250	1.250	6.000	1.500	1.500	ICSN-533	NL-58	CL-9	XNS-58	S-58	
MCKNL-205D	9T2622064D	CN_-54	1.250	1.250	6.000	1.500	1.500	ICSN-533	NL-58	CL-9	XNS-58	S-58	
MCKNR-166D	9T2641672D	CN_-64	1.000	1.000	6.000	1.470	1.250	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCKNL-166D	9T2621672D	CN_-64	1.000	1.000	6.000	1.470	1.250	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCKNR-206D	9T2642072D	CN_-64	1.250	1.250	6.000	1.470	1.500	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCKNL-206D	9T2622072D	CN_-64	1.250	1.250	6.000	1.470	1.500	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCKNR-246E	9T2642472E	CN_-64	1.500	1.500	7.000	1.470	2.000	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCKNL-246E	9T2622472E	CN_-64	1.500	1.500	7.000	1.470	2.000	ICSN-633	NL-68	CL-12	XNS-510	S-68	

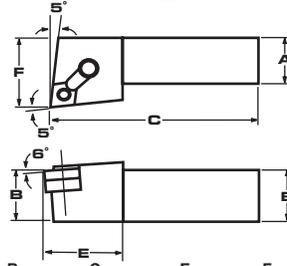
# TURNING



## MCLNL/R

### 5° Holder for 80° Diamond

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

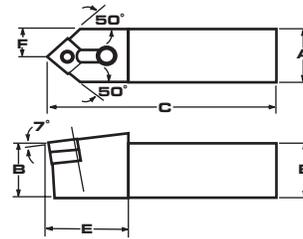
#### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MCLNR-104A	9T2801056A	CN_-43	0.625	0.625	4.000	1.200	1.000	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCLNL-104A	9T2781056A	CN_-43	0.625	0.625	4.000	1.200	1.000	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCLNR-124B	9T2801256B	CN_-43	0.750	0.750	4.500	1.200	1.000	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCLNL-124B	9T2781256B	CN_-43	0.750	0.750	4.500	1.200	1.000	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCLNR-164C	9T2801656C	CN_-43	1.000	1.000	5.000	1.200	1.250	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCLNL-164C	9T2781656C	CN_-43	1.000	1.000	5.000	1.200	1.250	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCLNR-164D	9T2801656D	CN_-43	1.000	1.000	6.000	1.200	1.250	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCLNL-164D	9T2781656D	CN_-43	1.000	1.000	6.000	1.200	1.250	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCLNR-204D	9T2802056D	CN_-43	1.250	1.250	6.000	1.200	1.500	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCLNL-204D	9T2782056D	CN_-43	1.250	1.250	6.000	1.200	1.500	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCLNR-854D	9T2804456D	CN_-43	1.000	1.250	6.000	1.200	1.250	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCLNL-854D	9T2784456D	CN_-43	1.000	1.250	6.000	1.200	1.250	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCLNR-165D	9T2801664D	CN_-54	1.000	1.000	6.000	1.370	1.250	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCLNL-165D	9T2781664D	CN_-54	1.000	1.000	6.000	1.370	1.250	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCLNR-205D	9T2802064D	CN_-54	1.250	1.250	6.000	1.370	1.500	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCLNL-205D	9T2782064D	CN_-54	1.250	1.250	6.000	1.370	1.500	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCLNR-855D	9T2804464D	CN_-54	1.000	1.250	6.000	1.370	1.250	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCLNL-855D	9T2784464D	CN_-54	1.000	1.250	6.000	1.370	1.250	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCLNR-865E	9T2804664E	CN_-54	1.000	1.500	7.000	1.370	1.250	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCLNL-865E	9T2784664E	CN_-54	1.000	1.500	7.000	1.370	1.250	ICSN-533	NL-58	CL-12	XNS-510	S-58	
MCLNR-166D	9T2801672D	CN_-64	1.000	1.000	6.000	1.490	1.250	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCLNL-166D	9T2781672D	CN_-64	1.000	1.000	6.000	1.490	1.250	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCLNR-206D	9T2802072D	CN_-64	1.250	1.250	6.000	1.490	1.500	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCLNL-206D	9T2782072D	CN_-64	1.250	1.250	6.000	1.490	1.500	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCLNR-246E	9T2802472E	CN_-64	1.500	1.500	7.000	1.490	2.000	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCLNL-246E	9T2782472E	CN_-64	1.500	1.500	7.000	1.490	2.000	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCLNR-856D	9T2804472D	CN_-64	1.000	1.250	6.000	1.490	2.000	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCLNL-856D	9T2784472D	CN_-64	1.000	1.250	6.000	1.490	2.000	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCLNR-866E	9T2804672E	CN_-64	1.000	1.500	7.000	1.490	2.000	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCLNL-866E	9T2784672E	CN_-64	1.000	1.500	7.000	1.490	2.000	ICSN-633	NL-68	CL-12	XNS-510	S-68	

## MCMNN

### 50° Holder for 80° Diamond

Most holders available with coolant port  
(ie: Add CP to end of description)



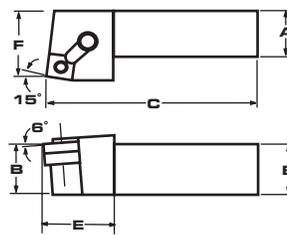
#### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MCMNN-164D	9T2821656D	CN_-43	1.000	1.000	6.000	1.390	0.500	ICSN-433	NL-46	CL-20	XNS-48	S-46	
MCMNN-206E	9T2822072E	CN_-64	1.250	1.250	7.000	1.670	0.625	ICSN-633	NL-68	CL-12	XNS-510	S-68	

## MCRNL/R

### 15° Holder for 80° Diamond

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

#### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MCRNR-124B	9T2521256B	CN_-43	0.750	0.750	4.500	1.240	0.750	ICSN-433	NL-46	CL-9	XNS-58	S-46	
MCRNL-124B	9T2501256B	CN_-43	0.750	0.750	4.500	1.240	0.755	ICSN-433	NL-46	CL-9	XNS-58	S-46	
MCRNR-164D	9T2521656D	CN_-43	1.000	1.000	6.000	1.240	1.250	ICSN-433	NL-46	CL-9	XNS-58	S-46	
MCRNL-164D	9T2501656D	CN_-43	1.000	1.000	6.000	1.240	1.250	ICSN-433	NL-46	CL-9	XNS-58	S-46	
MCRNR-165D	9T2521664D	CN_-54	1.000	1.000	6.000	1.340	1.250	ICSN-533	NL-58	CL-9	XNS-510	S-58	
MCRNL-165D	9T2501664D	CN_-54	1.000	1.000	6.000	1.340	1.250	ICSN-533	NL-58	CL-9	XNS-510	S-58	
MCRNR-205D	9T2522064D	CN_-54	1.250	1.250	6.000	1.340	1.500	ICSN-533	NL-58	CL-9	XNS-510	S-58	
MCRNL-205D	9T2502064D	CN_-54	1.250	1.250	6.000	1.340	1.500	ICSN-533	NL-58	CL-9	XNS-510	S-58	
MCRNR-206D	9T2522072D	CN_-64	1.250	1.250	6.000	1.490	1.500	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCRNL-206D	9T2502072D	CN_-64	1.250	1.250	6.000	1.490	1.500	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCRNR-246E	9T2522472E	CN_-64	1.500	1.500	7.000	1.490	2.000	ICSN-633	NL-68	CL-12	XNS-510	S-68	
MCRNL-246E	9T2502472E	CN_-64	1.500	1.500	7.000	1.490	2.000	ICSN-633	NL-68	CL-12	XNS-510	S-68	



# TURNING

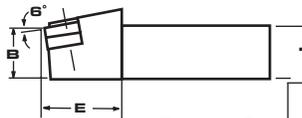
## MDJNL/R

5° Holder for 55° Diamond



RH SHOWN

Most holders available with coolant port  
(ie: Add CP to end of description)

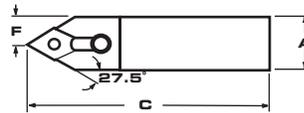


### PARTS

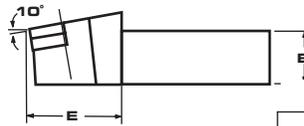
Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MDJNR-124B	9T2921256B	DN_-43	0.750	0.750	4.500	1.380	1.000	IDSN-433	NL-46	TC-250	STC-11	S-46	
MDJNL-124B	9T2901256B	DN_-43	0.750	0.750	4.500	1.380	1.000	IDSN-433	NL-46	TC-250	STC-11	S-46	
MDJNR-164D	9T2921656D	DN_-43	1.000	1.000	6.000	1.240	1.250	IDSN-433	NL-46	CL-20	XNS-48	S-46	
MDJNL-164D	9T2901656D	DN_-43	1.000	1.000	6.000	1.240	1.250	IDSN-433	NL-46	CL-20	XNS-48	S-46	
MDJNR-204D	9T2922056D	DN_-43	1.250	1.250	6.000	1.240	1.500	IDSN-433	NL-46	CL-20	XNS-48	S-46	
MDJNL-204D	9T2902056D	DN_-43	1.250	1.250	6.000	1.240	1.500	IDSN-433	NL-46	CL-20	XNS-48	S-46	
MDJNR-854D	9T2924456D	DN_-43	1.000	1.250	6.000	1.240	1.250	IDSN-433	NL-46	CL-20	XNS-48	S-46	
MDJNL-854D	9T2904456D	DN_-43	1.000	1.250	6.000	1.240	1.250	IDSN-433	NL-46	CL-20	XNS-48	S-46	
MDJNR-165D	9T2921664D	DN_-54	1.000	1.000	6.000	1.470	1.250	IDSN-533	NL-58	CL-12	XNS-510	S-58	
MDJNL-165D	9T2901664D	DN_-54	1.000	1.000	6.000	1.470	1.250	IDSN-533	NL-58	CL-12	XNS-510	S-58	
MDJNR-205D	9T2922064D	DN_-54	1.250	1.250	6.000	1.470	1.250	IDSN-533	NL-58	CL-12	XNS-510	S-58	
MDJNL-205D	9T2902064D	DN_-54	1.250	1.250	6.000	1.470	1.250	IDSN-533	NL-58	CL-12	XNS-510	S-58	
MDJNR-855D	9T2924464D	DN_-54	1.000	1.250	6.000	1.470	1.500	IDSN-533	NL-58	CL-12	XNS-510	S-58	
MDJNL-855D	9T2904464D	DN_-54	1.000	1.250	6.000	1.470	1.500	IDSN-533	NL-58	CL-12	XNS-510	S-58	
MDJNR-865E	9T2924664E	DN_-54	1.000	1.500	7.000	1.470	1.250	IDSN-533	NL-58	CL-12	XNS-510	S-58	
MDJNL-865E	9T2904664E	DN_-54	1.000	1.500	7.000	1.470	1.250	IDSN-533	NL-58	CL-12	XNS-510	S-58	

## MDPNN

27.5° Holder for 55° Diamond



Most holders available with coolant port  
(ie: Add CP to end of description)

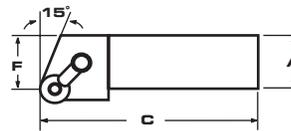


### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MDPNN-164D	9T2961656D	DN_-43	1.000	1.000	6.000	1.630	0.519	IDSN-433	NL-46	CL-12	XNS-510	S-46	
MDPNN-204D	9T2962056D	DN_-43	1.250	1.250	6.000	1.630	0.750	IDSN-433	NL-46	CL-12	XNS-510	S-46	
MDPNN-165D	9T2961664D	DN_-54	1.000	1.000	6.000	1.920	0.528	IDSN-533	NL-58	CL-12	XNS-510	S-58	
MDPNN-205D	9T2962064D	DN_-54	1.250	1.250	6.000	1.920	0.653	IDSN-533	NL-58	CL-12	XNS-510	S-58	
MDPNN-855D	9T2964464D	DN_-54	1.000	1.250	6.000	1.920	0.528	IDSN-533	NL-58	CL-12	XNS-510	S-58	

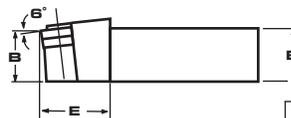
## MRGNL/R

15° Holder for Round Insert



RH SHOWN

Most holders available with coolant port  
(ie: Add CP to end of description)



### PARTS

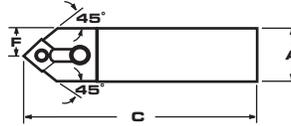
Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MRGNR-164D	9T3141656D	RN_-43	1.000	1.000	6.000	1.250	1.250	IRSN-433	NL-46	CL-20	XNS-48	S-46	
MRGNL-164D	9T3121656D	RN_-43	1.000	1.000	6.000	1.250	1.250	IRSN-433	NL-46	CL-20	XNS-48	S-46	
MRGNR-165D	9T3141664D	RN_-54	1.000	1.000	6.000	1.380	1.250	IRSN-533	NL-58	CL-12	XNS-510	S-58	
MRGNL-165D	9T3121664D	RN_-54	1.000	1.000	6.000	1.380	1.250	IRSN-533	NL-58	CL-12	XNS-510	S-58	
MRGNR-205D	9T3142064D	RN_-54	1.250	1.250	6.000	1.380	1.500	IRSN-533	NL-58	CL-12	XNS-510	S-58	
MRGNL-205D	9T3122064D	RN_-54	1.250	1.250	6.000	1.380	1.500	IRSN-533	NL-58	CL-12	XNS-510	S-58	
MRGNR-166D	9T3141672D	RN_-64	1.000	1.000	6.000	1.500	1.250	IRSN-633	NL-68	CL-9	XNS-510	S-68	
MRGNL-166D	9T3121672D	RN_-64	1.000	1.000	6.000	1.500	1.250	IRSN-633	NL-68	CL-9	XNS-510	S-68	
MRGNR-206D	9T3142072D	RN_-64	1.250	1.250	6.000	1.500	1.500	IRSN-633	NL-68	CL-9	XNS-510	S-68	
MRGNL-206D	9T3122072D	RN_-64	1.250	1.250	6.000	1.500	1.500	IRSN-633	NL-68	CL-9	XNS-510	S-68	

# TURNING

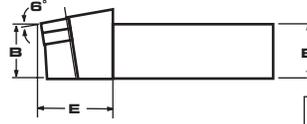


## MSDNN

### 45° Holder for 90° Square



Most holders available with coolant port  
(ie: Add CP to end of description)



#### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp	Seat
								Seat	Pin	Clamp	Screw	Screw
MSDNN-103B	9T3301048B	SN_-32	0.625	0.625	4.500	1.140	0.312	ISSN-322	NL-34	CL-6	XNS-36	S-34
MSDNN-123B	9T3301248B	SN_-32	0.750	0.750	4.500	1.140	0.375	ISSN-322	NL-34	CL-6	XNS-36	S-34
MSDNN-124B	9T3301256B	SN_-43	0.750	0.750	4.500	1.340	0.375	ISSN-433	NL-46	CL-9	XNS-59	S-46
MSDNN-164D	9T3301656D	SN_-43	1.000	1.000	6.000	1.340	0.500	ISSN-433	NL-46	CL-9	XNS-59	S-46
MSDNN-165D	9T3301664D	SN_-54	1.000	1.000	6.000	1.610	0.500	ISSN-533	NL-58	CL-12	XNS-510	S-58
MSDNN-205D	9T3302064D	SN_-54	1.250	1.250	6.000	1.610	0.625	ISSN-533	NL-58	CL-12	XNS-510	S-58
MSDNN-855D	9T3304464D	SN_-54	1.000	1.250	6.000	1.610	0.500	ISSN-533	NL-58	CL-12	XNS-510	S-58
MSDNN-206E	9T3302072E	SN_-64	1.250	1.250	7.000	1.620	0.625	ISSN-633	NL-68	CL-12	XNS-510	S-69
MSDNN-856D	9T3304472D	SN_-64	1.000	1.500	6.000	1.730	0.500	ISSN-633	NL-68	CL-12	XNS-510	S-69
MSDNN-248E	9T3302483E	SN_-86	1.500	1.500	7.000	2.240	0.750	ISSN-844	NL-810	CL-24	XNS-610	S-810
MSDNN-328K	9T3303283K	SN_-86	2.000	2.000	14.000	2.240	1.000	ISSN-844	NL-810	CL-24	XNS-610	S-810

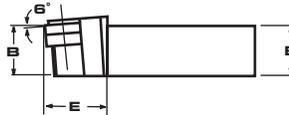
## MSKNL/R

### 15° Holder for 90° Square



RH SHOWN

Most holders available with coolant port  
(ie: Add CP to end of description)



#### PARTS

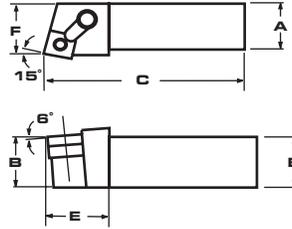
Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp	Seat
								Seat	Pin	Clamp	Screw	Screw
MSKNR-123B	9T3361248B	SN_-32	0.750	0.750	4.500	1.210	1.000	ISSN-322	NL-34	CL-6	XNS-56	S-34
MSKNL-123B	9T3341248B	SN_-32	0.750	0.750	4.500	1.210	1.000	ISSN-322	NL-34	CL-6	XNS-56	S-34
MSKNR-124B	9T3361256B	SN_-43	0.750	0.750	4.500	1.210	1.000	ISSN-433	NL-46	CL-9	XNS-59	S-46
MSKNL-124B	9T3341256B	SN_-43	0.750	0.750	4.500	1.210	1.000	ISSN-433	NL-46	CL-9	XNS-59	S-46
MSKNR-164D	9T3361656D	SN_-43	1.000	1.000	6.000	1.250	1.250	ISSN-433	NL-46	CL-9	XNS-59	S-46
MSKNL-164D	9T3341656D	SN_-43	1.000	1.000	6.000	1.250	1.250	ISSN-433	NL-46	CL-9	XNS-59	S-46
MSKNR-165D	9T3361664D	SN_-54	1.000	1.000	6.000	1.500	1.250	ISSN-533	NL-58	CL-12	XNS-510	S-58
MSKNL-165D	9T3341664D	SN_-54	1.000	1.000	6.000	1.500	1.250	ISSN-533	NL-58	CL-12	XNS-510	S-58
MSKNR-205D	9T3362064D	SN_-54	1.250	1.250	6.000	1.500	1.500	ISSN-533	NL-58	CL-12	XNS-510	S-58
MSKNL-205D	9T3342064D	SN_-54	1.250	1.250	6.000	1.500	1.500	ISSN-533	NL-58	CL-12	XNS-510	S-58
MSKNR-206D	9T3362072D	SN_-64	1.250	1.250	6.000	1.470	1.500	ISSN-633	NL-68	CL-24	XNS-610	S-69
MSKNL-206D	9T3342072D	SN_-64	1.250	1.250	6.000	1.470	1.500	ISSN-633	NL-68	CL-24	XNS-610	S-69
MSKNR-246E	9T3362472E	SN_-64	1.500	1.500	7.000	1.470	2.000	ISSN-633	NL-68	CL-24	XNS-610	S-69
MSKNL-246E	9T3342472E	SN_-64	1.500	1.500	7.000	1.470	2.000	ISSN-633	NL-68	CL-24	XNS-610	S-69



# TURNING

## MSRNL/R

15° Holder for 90° Square



RH SHOWN

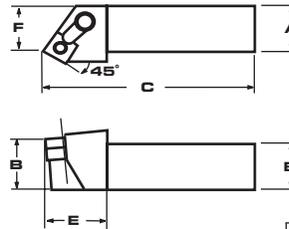
Most holders available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MSRNR-83B	9T3420848B	SN_-32	0.500	0.500	4.500	1.030	0.658	ISSN-322	NL-34	CL-6	XNS-36	S-46	
MSRNL-83B	9T3400848B	SN_-32	0.500	0.500	4.500	1.030	0.658	ISSN-322	NL-34	CL-6	XNS-36	S-46	
MSRNR-124B	9T3421256B	SN_-43	0.750	0.750	4.500	1.250	0.878	ISSN-433	NL-46	CL-9	XNS-59	S-46	
MSRNL-124B	9T3401256B	SN_-43	0.750	0.750	4.500	1.250	0.878	ISSN-433	NL-46	CL-9	XNS-59	S-46	
MSRNR-164D	9T3421656D	SN_-43	1.000	1.000	6.000	1.250	1.128	ISSN-433	NL-46	CL-9	XNS-59	S-46	
MSRNL-164D	9T3401656D	SN_-43	1.000	1.000	6.000	1.250	1.128	ISSN-433	NL-46	CL-9	XNS-59	S-46	
MSRNR-165D	9T3421664D	SN_-54	1.000	1.000	6.000	1.440	1.100	ISSN-533	NL-58	CL-12	XNS-510	S-58	
MSRNL-165D	9T3401664D	SN_-54	1.000	1.000	6.000	1.440	1.100	ISSN-533	NL-58	CL-12	XNS-510	S-58	
MSRNR-205D	9T3422064D	SN_-54	1.250	1.250	6.000	1.440	1.350	ISSN-533	NL-58	CL-12	XNS-510	S-58	
MSRNL-205D	9T3402064D	SN_-54	1.250	1.250	6.000	1.440	1.350	ISSN-533	NL-58	CL-12	XNS-510	S-58	
MSRNR-855D	9T3424464D	SN_-54	1.000	1.250	6.000	1.460	1.100	ISSN-533	NL-58	CL-12	XNS-510	S-58	
MSRNL-855D	9T3404464D	SN_-54	1.000	1.250	6.000	1.460	1.100	ISSN-533	NL-58	CL-12	XNS-510	S-58	
MSRNR-206D	9T3422072D	SN_-64	1.250	1.250	6.000	1.560	1.318	ISSN-633	NL-68	CL-12	XNS-510	S-68	
MSRNL-206D	9T3402072D	SN_-64	1.250	1.250	6.000	1.560	1.318	ISSN-633	NL-68	CL-12	XNS-510	S-68	
MSRNR-246E	9T3422472E	SN_-64	1.500	1.500	7.000	1.560	1.818	ISSN-633	NL-68	CL-12	XNS-510	S-68	
MSRNL-246E	9T3402472E	SN_-64	1.500	1.500	7.000	1.560	1.818	ISSN-633	NL-68	CL-12	XNS-510	S-68	
MSRNR-856D	9T3422472E	SN_-64	1.000	1.250	6.000	1.500	1.068	ISSN-633	NL-68	CL-12	XNS-510	S-68	
MSRNL-856D	9T3402472E	SN_-64	1.000	1.250	6.000	1.500	1.068	ISSN-633	NL-68	CL-12	XNS-510	S-68	
MSRNR-328K	9T3423283K	SN_-86	2.000	2.000	14.000	1.620	2.262	ISSN-844	NL-810	CL-24	XNS-610	S-810	
MSRNL-328K	9T3403283K	SN_-86	2.000	2.000	14.000	1.620	2.262	ISSN-844	NL-810	CL-24	XNS-610	S-810	

## MSSNL/R

45° Holder for 90° Square



RH SHOWN

Most holders available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MSSNR-83B	9T3480848B	SN_-32	0.500	0.500	4.500	1.030	0.658	ISSN-322	NL-34	CL-6	XNS-46	S-46	
MSSNL-83B	9T3460848B	SN_-32	0.500	0.500	4.500	1.030	0.658	ISSN-322	NL-34	CL-6	XNS-46	S-46	
MSSNR-124B	9T3481256B	SN_-43	0.750	0.750	4.500	1.240	0.662	ISSN-433	NL-46	CL-9	XNS-49	S-46	
MSSNL-124B	9T3461256B	SN_-43	0.750	0.750	4.500	1.240	0.662	ISSN-433	NL-46	CL-9	XNS-49	S-46	
MSSNR-164D	9T3481656D	SN_-43	1.000	1.000	6.000	1.240	0.912	ISSN-433	NL-46	CL-9	XNS-49	S-46	
MSSNL-164D	9T3461656D	SN_-43	1.000	1.000	6.000	1.240	0.912	ISSN-433	NL-46	CL-9	XNS-49	S-46	
MSSNR-165D	9T3481664D	SN_-54	1.000	1.000	6.000	1.370	0.912	ISSN-533	NL-58	CL-12	XNS-510	S-58	
MSSNL-165D	9T3461664D	SN_-54	1.000	1.000	6.000	1.370	0.912	ISSN-533	NL-58	CL-12	XNS-510	S-58	
MSSNR-205D	9T3482064D	SN_-54	1.250	1.250	6.000	1.370	1.500	ISSN-533	NL-58	CL-12	XNS-510	S-58	
MSSNL-205D	9T3462064D	SN_-54	1.250	1.250	6.000	1.370	1.500	ISSN-533	NL-58	CL-12	XNS-510	S-58	
MSSNR-855D	9T3484464D	SN_-54	1.000	1.250	6.000	1.370	1.250	ISSN-533	NL-58	CL-12	XNS-510	S-58	
MSSNL-855D	9T3464464D	SN_-54	1.000	1.250	6.000	1.370	1.250	ISSN-533	NL-58	CL-12	XNS-510	S-58	
MSSNR-206D	9T3482072D	SN_-64	1.250	1.250	6.000	1.490	1.500	ISSN-633	NL-68	CL-12	XNS-510	S-68	
MSSNL-206D	9T3462072D	SN_-64	1.250	1.250	6.000	1.490	1.500	ISSN-633	NL-68	CL-12	XNS-510	S-68	
MSSNR-246E	9T3482472E	SN_-64	1.500	1.500	7.000	1.490	2.000	ISSN-633	NL-68	CL-12	XNS-510	S-68	
MSSNL-246E	9T3462472E	SN_-64	1.500	1.500	7.000	1.490	2.000	ISSN-633	NL-68	CL-12	XNS-510	S-68	
MSSNR-856D	9T3482472E	SN_-64	1.000	1.250	6.000	1.490	2.000	ISSN-633	NL-68	CL-12	XNS-510	S-68	
MSSNL-856D	9T3462472E	SN_-64	1.000	1.250	6.000	1.490	2.000	ISSN-633	NL-68	CL-12	XNS-510	S-68	
MSSNR-328K	9T3483283K	SN_-86	2.000	2.000	14.000	1.620	2.262	ISSN-844	NL-810	CL-24	XNS-610	S-810	
MSSNL-328K	9T3463283K	SN_-86	2.000	2.000	14.000	1.620	2.262	ISSN-844	NL-810	CL-24	XNS-610	S-810	

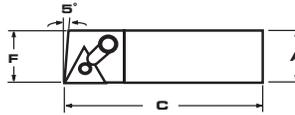
TURNING

# TURNING



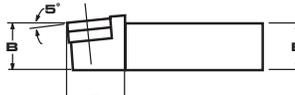
## MTANL/R

### 5° Holder for 60° Triangle



RH SHOWN

Most holders available with coolant port  
(ie: Add CP to end of description)

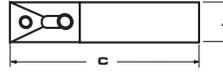


#### PARTS

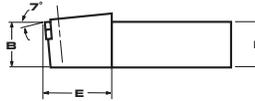
Description	EDP Code	Insert	A	B	C	E	F	Lock		Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw
MTANR-123A	9T3541248B	TN_-32	0.750	0.750	4.000	1.060	0.750	ITSN-322	NL-34	CL-6	XNS-36	S-34
MTANL-123A	9T3521248B	TN_-32	0.750	0.750	4.000	1.060	0.750	ITSN-322	NL-34	CL-6	XNS-36	S-34
MTANR-164D	9T3541656D	TN_-43	1.000	1.000	6.000	1.220	1.000	ITSN-433	NL-46	CL-9	XNS-49	S-46
MTANL-164D	9T3521656D	TN_-43	1.000	1.000	6.000	1.220	1.000	ITSN-433	NL-46	CL-9	XNS-49	S-46

## MTCNN

### 0° Holder for 60° Triangle



Most holders available with coolant port  
(ie: Add CP to end of description)



#### PARTS

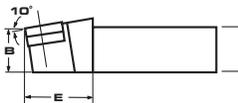
Description	EDP Code	Insert	A	B	C	E	F	Lock		Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw
MTCNN-443F	9T3640949F	TN_-33	0.500	0.500	8.000	1.130	N/A	ITSN-323	NL-34L	CL-7	XNS-36	S-46
MTCNN-124D	9T3641256D	TN_-43	0.750	0.750	6.000	1.430	N/A	ITSN-433	NL-46	CL-12	XNS-59	S-46
MTCNN-644F	9T3641456F	TN_-43	0.750	1.000	8.000	1.430	N/A	ITSN-433	NL-46	CL-12	XNS-59	S-46

## MTENNS

### 60° Holder for 60° Triangle



Most holders available with coolant port  
(ie: Add CP to end of description)

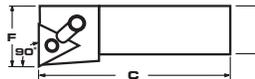


#### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock		Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw
MTENNS-103B	9T3681049B	TN_-33	0.625	0.625	4.500	1.160	0.312	ITSN-323	NL-34L	CL-6	XNS-36	N/A
MTENNS-123B	9T3681249B	TN_-33	0.750	0.750	4.500	1.160	0.375	ITSN-323	NL-34L	CL-6	XNS-36	N/A
MTENNS-853D	9T3684449D	TN_-33	1.000	1.250	6.000	1.160	0.500	ITSN-323	NL-34L	CL-6	XNS-36	N/A
MTENNS-104B	9T3681056B	TN_-43	0.625	0.625	4.500	1.140	0.312	ITSN-433	NL-46	CL-9	XNS-59	N/A
MTENNS-124B	9T3681256B	TN_-43	0.750	0.750	4.500	1.500	0.375	ITSN-433	NL-46	CL-9	XNS-59	N/A
MTENNS-164D	9T3681656B	TN_-43	1.000	1.000	6.000	1.500	0.500	ITSN-433	NL-46	CL-9	XNS-59	N/A
MTENNS-854D	9T3684456D	TN_-43	1.000	1.250	6.000	1.500	0.500	ITSN-433	NL-46	CL-9	XNS-59	N/A
MTENNS-864E	9T3684656E	TN_-43	1.000	1.500	7.000	1.500	0.500	ITSN-433	NL-46	CL-9	XNS-59	N/A
MTENNS-205D	9T3682064D	TN_-54	1.250	1.250	6.000	1.640	0.625	ITSN-533	NL-58	CL-9	XNS-510	N/A
MTENNS-246E	9T3682476E	TN_-64	1.500	1.500	7.000	1.950	0.750	ITSN-637	NL-68L	CL-12	XNS-510	N/A

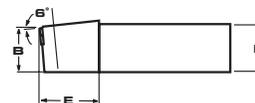
## MTFNL/R

### 90° Holder for 60° Triangle



RH SHOWN

Most holders available with coolant port  
(ie: Add CP to end of description)



#### PARTS

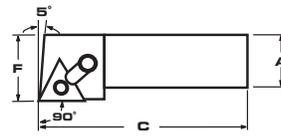
Description	EDP Code	Insert	A	B	C	E	F	Lock		Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw
MTFNR-123B	9T3741249B	TN_-33	0.750	0.750	4.500	0.940	1.000	ITSN-323	NL-34L	CL-6	XNS-36	S-46
MTFNL-123B	9T3721249B	TN_-33	0.750	0.750	4.500	0.940	1.000	ITSN-323	NL-34L	CL-6	XNS-36	S-46
MTFNR-163C	9T3741649C	TN_-33	1.000	1.000	5.000	0.940	1.250	ITSN-323	NL-34L	CL-6	XNS-36	S-46
MTFNL-163C	9T3721649C	TN_-33	1.000	1.000	5.000	0.940	1.250	ITSN-323	NL-34L	CL-6	XNS-36	S-46
MTFNR-164D	9T3741656D	TN_-43	1.000	1.000	6.000	1.220	1.250	ITSN-433	NL-46	CL-9	XNS-510	S-46
MTFNL-164D	9T3721656D	TN_-43	1.000	1.000	6.000	1.220	1.250	ITSN-433	NL-46	CL-9	XNS-510	S-46
MTFNR-204D	9T3742056D	TN_-43	1.250	1.250	6.000	1.220	1.500	ITSN-433	NL-46	CL-9	XNS-510	S-46
MTFNL-204D	9T3722056D	TN_-43	1.250	1.250	6.000	1.220	1.500	ITSN-433	NL-46	CL-9	XNS-510	S-46
MTFNR-854D	9T3744456D	TN_-43	1.000	1.250	6.000	1.220	1.250	ITSN-433	NL-46	CL-9	XNS-510	S-46
MTFNL-854D	9T3724456D	TN_-43	1.000	1.250	6.000	1.220	1.250	ITSN-433	NL-46	CL-9	XNS-510	S-46
MTFNR-165D	9T3741664D	TN_-54	1.000	1.000	6.000	1.430	1.250	ITSN-533	NL-58	CL-12	XNS-510	S-58
MTFNL-165D	9T3721664D	TN_-54	1.000	1.000	6.000	1.430	1.250	ITSN-533	NL-58	CL-12	XNS-510	S-58
MTFNR-205D	9T3742064D	TN_-54	1.250	1.250	6.000	1.430	1.500	ITSN-533	NL-58	CL-12	XNS-510	S-58
MTFNL-205D	9T3722064D	TN_-54	1.250	1.250	6.000	1.430	1.500	ITSN-533	NL-58	CL-12	XNS-510	S-58
MTFNR-855D	9T3744464D	TN_-54	1.000	1.250	6.000	1.430	1.250	ITSN-533	NL-58	CL-12	XNS-510	S-58
MTFNL-855D	9T3724464D	TN_-54	1.000	1.250	6.000	1.430	1.250	ITSN-533	NL-58	CL-12	XNS-510	S-58
MTFNR-246E	9T3742476E	TN_-66	1.500	1.500	7.000	1.490	1.250	ITSN-633	NL-68L	CL-12	XNS-510	S-68
MTFNL-246E	9T3722476E	TN_-66	1.500	1.500	7.000	1.490	2.000	ITSN-633	NL-68L	CL-12	XNS-510	S-68



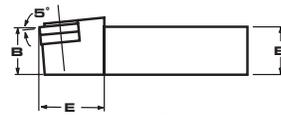
# TURNING

## MTGNL/R

90° Holder for 60° Triangle



RH SHOWN



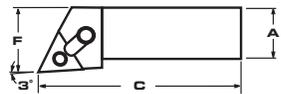
### PARTS

Most holders available with coolant port  
(ie: Add CP to end of description)

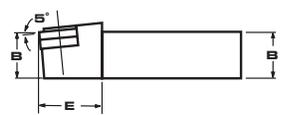
Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MTGNR-123B	9T3801249B	TN_-33	0.750	0.750	4.500	1.120	1.000	ITSN-323	NL-34L	CL-6	XNS-36	S-34	
MTGNL-123B	9T3781249B	TN_-33	0.750	0.750	4.500	1.120	1.000	ITSN-323	NL-34L	CL-6	XNS-36	S-34	
MTGNR-163C	9T3801649C	TN_-33	1.000	1.000	5.000	1.120	1.250	ITSN-323	NL-34L	CL-6	XNS-36	S-46	
MTGNL-163C	9T3781649C	TN_-33	1.000	1.000	5.000	1.120	1.250	ITSN-323	NL-34L	CL-6	XNS-36	S-46	
MTGNR-164D	9T3801656D	TN_-43	1.000	1.000	6.000	1.220	1.250	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTGNL-164D	9T3781656D	TN_-43	1.000	1.000	6.000	1.220	1.250	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTGNR-204D	9T3802056D	TN_-43	1.250	1.250	6.000	1.220	1.500	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTGNL-204D	9T3782056D	TN_-43	1.250	1.250	6.000	1.220	1.500	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTGNR-854D	9T3804456D	TN_-43	1.000	1.250	6.000	1.220	1.250	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTGNL-854D	9T3784456D	TN_-43	1.000	1.250	6.000	1.220	1.250	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTGNR-165D	9T3801664D	TN_-54	1.000	1.000	6.000	1.430	1.250	ITSN-533	NL-58	CL-12	XNS-510	S-58	
MTGNL-165D	9T3781664D	TN_-54	1.000	1.000	6.000	1.430	1.250	ITSN-533	NL-58	CL-12	XNS-510	S-58	
MTGNR-205D	9T3802064D	TN_-54	1.250	1.250	6.000	1.430	1.500	ITSN-533	NL-58	CL-12	XNS-510	S-58	
MTGNL-205D	9T3782064D	TN_-54	1.250	1.250	6.000	1.430	1.500	ITSN-533	NL-58	CL-12	XNS-510	S-58	
MTGNR-855D	9T3804464D	TN_-54	1.000	1.250	6.000	1.430	1.250	ITSN-533	NL-58	CL-12	XNS-510	S-58	
MTGNL-855D	9T3784464D	TN_-54	1.000	1.250	6.000	1.430	1.250	ITSN-533	NL-58	CL-12	XNS-510	S-58	
MTGNR-246E	9T3802472E	TN_-66	1.500	1.500	7.000	1.490	1.250	ITSN-633	NL-68L	CL-12	XNS-510	S-68	
MTGNL-246E	9T3782472E	TN_-66	1.500	1.500	7.000	1.490	2.000	ITSN-633	NL-68L	CL-12	XNS-510	S-68	

## MTJNLS/RS

3° Holder for 60° Triangle



RH SHOWN



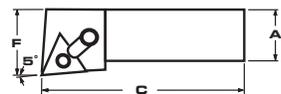
### PARTS

Most holders available with coolant port  
(ie: Add CP to end of description)

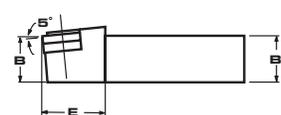
Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MTJNRS-123B	9T3861249B	TN_-33	0.750	0.750	4.500	1.120	1.000	ITSN-323	NL-34L	CL-6	XNS-36	N/A	
MTJNLS-123B	9T3841249B	TN_-33	0.750	0.750	4.500	1.120	1.000	ITSN-323	NL-34L	CL-6	XNS-36	N/A	
MTJNRS-164D	9T3861656D	TN_-43	1.000	1.000	6.000	1.190	1.250	ITSN-433	NL-46	CL-9	XNS-510	N/A	
MTJNLS-164D	9T3841656D	TN_-43	1.000	1.000	6.000	1.190	1.250	ITSN-433	NL-46	CL-9	XNS-510	N/A	
MTJNRS-204D	9T3862056D	TN_-43	1.250	1.250	6.000	1.190	1.500	ITSN-433	NL-46	CL-9	XNS-510	N/A	
MTJNLS-204D	9T3842056D	TN_-43	1.250	1.250	6.000	1.190	1.500	ITSN-433	NL-46	CL-9	XNS-510	N/A	
MTJNRS-854D	9T3864456D	TN_-43	1.000	1.250	6.000	1.190	1.250	ITSN-433	NL-46	CL-9	XNS-510	N/A	
MTJNLS-854D	9T3844456D	TN_-43	1.000	1.250	6.000	1.190	1.250	ITSN-433	NL-46	CL-9	XNS-510	N/A	
MTJNRS-864E	9T3864656E	TN_-43	1.000	1.500	7.000	1.190	1.250	ITSN-433	NL-46	CL-9	XNS-510	N/A	
MTJNLS-864E	9T3844656E	TN_-43	1.000	1.500	7.000	1.190	1.250	ITSN-433	NL-46	CL-9	XNS-510	N/A	
MTJNRS-205D	9T3862064D	TN_-54	1.250	1.250	6.000	1.440	1.500	ITSN-533	NL-58	CL-9	XNS-510	N/A	
MTJNLS-205D	9T3842064D	TN_-54	1.250	1.250	6.000	1.440	1.500	ITSN-533	NL-58	CL-9	XNS-510	N/A	
MTJNRS-865D	9T3864664D	TN_-54	1.000	1.500	6.000	1.440	1.250	ITSN-533	NL-58	CL-9	XNS-510	N/A	
MTJNLS-865D	9T3844664D	TN_-54	1.000	1.500	6.000	1.440	1.250	ITSN-533	NL-58	CL-9	XNS-510	N/A	
MTJNRS-246E	9T3862472E	TN_-66	1.500	1.500	7.000	1.670	2.000	ITSN-633	NL-68L	CL-12	XNS-510	N/A	
MTJNLS-246E	9T3842472E	TN_-66	1.500	1.500	7.000	1.670	2.000	ITSN-633	NL-68L	CL-12	XNS-510	N/A	

## MTLNL/R

5° Holder for 60° Triangle



RH SHOWN



### PARTS

Most holders available with coolant port  
(ie: Add CP to end of description)

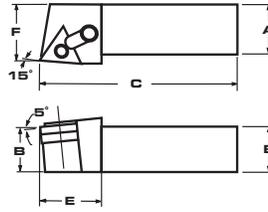
Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MTLNR-123B	9T3921249B	TN_-33	0.750	0.750	4.500	1.120	1.000	ITSN-323	NL-34L	CL-6	XNS-36	N/A	
MTLNL-123B	9T3901249B	TN_-33	0.750	0.750	4.500	1.120	1.000	ITSN-323	NL-34L	CL-6	XNS-36	N/A	
MTLNR-163D	9T3921649D	TN_-33	1.000	1.000	6.000	1.120	1.250	ITSN-323	NL-34L	CL-6	XNS-36	N/A	
MTLNL-163D	9T3901649D	TN_-33	1.000	1.000	6.000	1.120	1.250	ITSN-323	NL-34L	CL-6	XNS-36	N/A	
MTLNR-164D	9T3921656D	TN_-43	1.000	1.000	6.000	1.240	1.250	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTLNL-164D	9T3901656D	TN_-43	1.000	1.000	6.000	1.240	1.250	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTLNR-204D	9T3922056D	TN_-43	1.250	1.250	6.000	1.280	1.500	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTLNL-204D	9T3902056D	TN_-43	1.250	1.250	6.000	1.280	1.500	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTLNR-205D	9T3922064D	TN_-54	1.250	1.250	6.000	1.400	1.500	ITSN-533	NL-58	CL-9	XNS-510	S-58	
MTLNL-205D	9T3902064D	TN_-54	1.250	1.250	6.000	1.400	1.500	ITSN-533	NL-58	CL-9	XNS-510	S-58	



## MTRNL/R

### 15° Holder for 60° Triangle

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

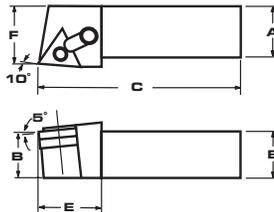
#### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MTRNR-123B	9T3981249B	TN_-33	0.750	0.750	4.500	1.200	0.847	ITSN-323	NL-34L	CL-20	XNS-46	S-34	
MTRNL-123B	9T3961249B	TN_-33	0.750	0.750	4.500	1.200	0.847	ITSN-323	NL-34L	CL-20	XNS-46	S-34	
MTRNR-163D	9T3981649D	TN_-33	1.000	1.000	6.000	1.200	1.097	ITSN-323	NL-34L	CL-20	XNS-46	S-34	
MTRNL-163D	9T3961649D	TN_-33	1.000	1.000	6.000	1.200	1.097	ITSN-323	NL-34L	CL-20	XNS-46	S-34	
MTRNR-164D	9T3981656D	TN_-43	1.000	1.000	6.000	1.240	1.040	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTRNL-164D	9T3961656D	TN_-43	1.000	1.000	6.000	1.240	1.040	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTRNR-165D	9T3981664D	TN_-54	1.000	1.000	6.000	1.620	0.990	ITSN-533	NL-58	CL-9	XNS-510	S-58	
MTRNL-165D	9T3961664D	TN_-54	1.000	1.000	6.000	1.620	0.990	ITSN-533	NL-58	CL-9	XNS-510	S-58	
MTRNR-205D	9T3982064D	TN_-54	1.250	1.250	6.000	1.620	1.240	ITSN-533	NL-58	CL-9	XNS-510	S-58	
MTRNL-205D	9T3962064D	TN_-54	1.250	1.250	6.000	1.620	1.240	ITSN-533	NL-58	CL-9	XNS-510	S-58	
MTRNR-246E	9T3982072E	TN_-66	1.500	1.500	7.000	1.680	1.685	ITSN-633	NL-68L	CL-12	XNS-510	S-68	
MTRNL-246E	9T3962072E	TN_-66	1.500	1.500	7.000	1.680	1.685	ITSN-633	NL-68L	CL-12	XNS-510	S-68	

## MTWNL/R

### 10° Holder for 60° Triangle

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

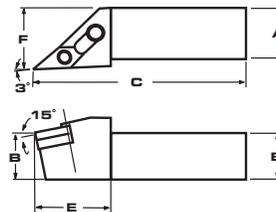
#### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MTWNR-123D	9T4141249D	TN_-33	0.750	0.750	6.000	1.350	0.875	ITSN-323	NL-34L	CL-6	XNS-36	S-34	
MTWNL-123D	9T4101249D	TN_-33	0.750	0.750	6.000	1.350	0.875	ITSN-323	NL-34L	CL-6	XNS-36	S-34	
MTWNR-164E	9T4141656E	TN_-43	1.000	1.000	7.000	1.750	1.094	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTWNL-164E	9T4101656E	TN_-43	1.000	1.000	7.000	1.750	1.094	ITSN-433	NL-46	CL-9	XNS-510	S-46	
MTWNR-205F	9T4142064F	TN_-54	1.250	1.250	8.000	1.840	1.312	ITSN-533	NL-58	CL-9	XNS-510	S-58	
MTWNL-205F	9T4102064F	TN_-54	1.250	1.250	8.000	1.840	1.312	ITSN-533	NL-58	CL-9	XNS-510	S-58	

## MVJNL/R

### 3° Holder for 35° Diamond

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

#### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MVJNR-123B	9T4221249B	VN_-33	0.750	0.750	4.500	1.660	1.000	IVSN-324	NL-34L	CL-30	XNS-36	S-34	
MVJNL-123B	9T4181249B	VN_-33	0.750	0.750	4.500	1.660	1.000	IVSN-324	NL-34L	CL-30	XNS-36	S-34	
MVJNR-163C	9T4221649C	VN_-33	1.000	1.000	5.000	1.660	1.250	IVSN-324	NL-34L	CL-30	XNS-36	S-34	
MVJNL-163C	9T4181649C	VN_-33	1.000	1.000	5.000	1.660	1.250	IVSN-324	NL-34L	CL-30	XNS-36	S-34	
MVJNR-203D	9T4222049D	VN_-33	1.250	1.250	6.000	1.660	1.500	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
MVJNL-203D	9T4182049D	VN_-33	1.250	1.250	6.000	1.660	1.500	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
MVJNR-853D	9T4224449D	VN_-33	1.000	1.250	6.000	1.660	1.250	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
MVJNL-853D	9T4184449D	VN_-33	1.000	1.250	6.000	1.660	1.250	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
MVJNR-164D	9T4221656D	VN_-43	1.000	1.000	6.000	2.000	1.250	IVSN-433	NL-46	CL-30	XNS-510	S-46	
MVJNL-164D	9T4181656D	VN_-43	1.000	1.000	6.000	2.000	1.250	IVSN-433	NL-46	CL-30	XNS-510	S-46	
MVJNR-204D	9T4222056D	VN_-43	1.250	1.250	6.000	2.000	1.500	IVSN-433	NL-46	CL-30	XNS-510	S-46	
MVJNL-204D	9T4182056D	VN_-43	1.250	1.250	6.000	2.000	1.500	IVSN-433	NL-46	CL-30	XNS-510	S-46	
MVJNR-864E	9T4224656E	VN_-43	1.000	1.500	8.000	2.000	1.250	IVSN-433	NL-46	CL-30	XNS-510	S-46	
MVJNL-864E	9T4184656E	VN_-43	1.000	1.500	8.000	2.000	1.250	IVSN-433	NL-46	CL-30	XNS-510	S-46	

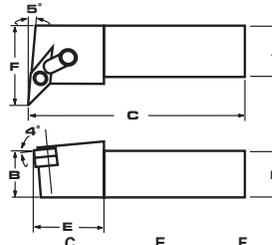


# TURNING

## MVLNL/R

5° Holder for 35° Diamond

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

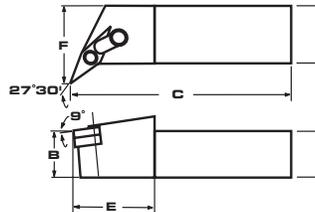
### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MVLNR-164D	9T4281656D	VN_-43	1.000	1.000	6.000	1.500	1.750	IVSN-433	NL-46	CL-12	XNS-510	S-46	
MVLNL-164D	9T4261656D	VN_-43	1.000	1.000	6.000	1.500	1.750	IVSN-433	NL-46	CL-12	XNS-510	S-46	
MVLNR-204D	9T4282056D	VN_-43	1.250	1.250	6.000	1.500	2.000	IVSN-433	NL-46	CL-12	XNS-510	S-46	
MVLNL-204D	9T4262056D	VN_-43	1.250	1.250	6.000	1.500	2.000	IVSN-433	NL-46	CL-12	XNS-510	S-46	

## MVNNL/R

27.5° Holder for 35° Diamond

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

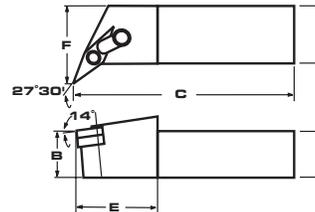
### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MVNNR-123B	9T4341249B	VN_-33	0.750	0.750	4.500	0.940	1.000	IVSN-323	NL-34L	CL-6	XNS-36	S-34	
MVNNL-123B	9T4321249B	VN_-33	0.750	0.750	4.500	0.940	1.000	IVSN-323	NL-34L	CL-6	XNS-36	S-34	
MVNNR-163D	9T4341649D	VN_-33	1.000	1.000	6.000	1.220	1.250	IVSN-323	NL-34L	CL-6	XNS-36	S-34	
MVNNL-163D	9T4321649D	VN_-33	1.000	1.000	6.000	1.220	1.250	IVSN-323	NL-34L	CL-6	XNS-36	S-34	
MVNNR-203D	9T4342049D	VN_-33	1.250	1.250	6.000	1.220	1.500	IVSN-323	NL-34L	CL-6	XNS-36	S-34	
MVNNL-203D	9T4322049D	VN_-33	1.250	1.250	6.000	1.220	1.500	IVSN-323	NL-34L	CL-6	XNS-36	S-34	

## MVTNL/R

27.5° Holder for 35° Diamond

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

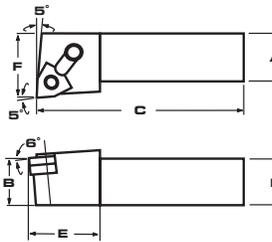
### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MVTNR-123B	9T4461249B	VN_-33	0.750	0.750	4.500	1.710	1.000	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
MVTNL-123B	9T4441249B	VN_-33	0.750	0.750	4.500	1.710	1.000	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
MVTNR-163D	9T4461649D	VN_-33	1.000	1.000	6.000	1.710	1.250	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
MVTNL-163D	9T4441649D	VN_-33	1.000	1.000	6.000	1.710	1.250	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
MVTNR-203D	9T4462049D	VN_-33	1.250	1.250	6.000	1.710	1.500	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
MVTNL-203D	9T4442049D	VN_-33	1.250	1.250	6.000	1.710	1.500	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
MVTNR-243E	9T4462449E	VN_-33	1.500	1.500	7.000	1.710	1.750	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
MVTNL-243E	9T4442449E	VN_-33	1.500	1.500	7.000	1.710	1.750	IVSN-324	NL-34L	CL-30	XNS-510	S-34	

## MWLNL/R

5° Holder for 80° Trigon

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

### PARTS

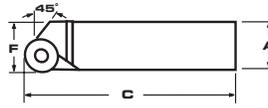
Description	EDP Code	Insert	A	B	C	E	F	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
MWLNR-123B	9T4561249B	WN_-33	0.750	0.750	4.500	1.200	1.000	IWSN-323	NL-34L	CL-6	XNS-36	N/A	
MWLNL-123B	9T4541249B	WN_-33	0.750	0.750	4.500	1.200	1.000	IWSN-323	NL-34L	CL-6	XNS-36	N/A	
MWLNR-163D	9T4561649D	WN_-33	1.000	1.000	6.000	1.200	1.250	IWSN-323	NL-34L	CL-6	XNS-36	N/A	
MWLNL-163D	9T4541649D	WN_-33	1.000	1.000	6.000	1.200	1.250	IWSN-323	NL-34L	CL-6	XNS-36	N/A	
MWLNR-203D	9T4562049D	WN_-33	1.250	1.250	6.000	1.200	1.500	IWSN-323	NL-34L	CL-6	XNS-36	N/A	
MWLNL-203D	9T4542049D	WN_-33	1.250	1.250	6.000	1.200	1.500	IWSN-323	NL-34L	CL-6	XNS-36	N/A	
MWLNR-124B	9T4561256B	WN_-43	0.750	0.750	4.500	1.200	1.000	IWSN-433	NL-46	CL-20	XNS-47	N/A	
MWLNL-124B	9T4541256B	WN_-43	0.750	0.750	4.500	1.200	1.000	IWSN-433	NL-46	CL-20	XNS-47	N/A	
MWLNR-164D	9T4561656D	WN_-43	1.000	1.000	6.000	1.200	1.250	IWSN-433	NL-46	CL-20	XNS-47	N/A	
MWLNL-164D	9T4541656D	WN_-43	1.000	1.000	6.000	1.200	1.250	IWSN-433	NL-46	CL-20	XNS-47	N/A	
MWLNR-204D	9T4562056D	WN_-43	1.250	1.250	6.000	1.200	1.500	IWSN-433	NL-46	CL-20	XNS-47	N/A	
MWLNL-204D	9T4542056D	WN_-43	1.250	1.250	6.000	1.200	1.500	IWSN-433	NL-46	CL-20	XNS-47	N/A	

# TURNING



## RAL/R

### 45° Holder for Round Insert



RH SHOWN



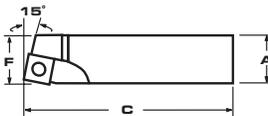
Most holders available with coolant port  
(ie: Add CP to end of description)

#### PARTS

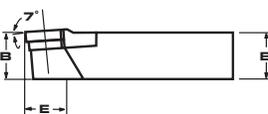
Description	EDP Code	Insert	A	B	C	E	F	Lock		Seat
								Seat	Pin	Screw
RAR-164	9T5121656	RN_-43	1.000	1.000	6.000	0.690	1.000	IRSN-43	CLP-38	N/A
RAL-164	9T5111656	RN_-43	1.000	1.000	6.000	0.690	1.000	IRSN-43	CLP-38	N/A
RAR-854	9T5124456	RN_-43	1.000	1.250	6.000	0.690	1.000	IRSN-43	CLP-310	N/A
RAL-854	9T5114456	RN_-43	1.000	1.250	6.000	0.690	1.000	IRSN-43	CLP-310	N/A
RAR-864	9T5124656	RN_-43	1.000	1.500	7.000	0.690	1.000	IRSN-43	CLP-312	N/A
RAL-864	9T5114656	RN_-43	1.000	1.500	7.000	0.690	1.000	IRSN-43	CLP-312	N/A
RAR-166	9T5121672	RN_-64	1.000	1.000	6.000	0.950	1.000	IRSN-63	CLP-58	N/A
RAL-166	9T5111672	RN_-64	1.000	1.000	6.000	0.950	1.000	IRSN-63	CLP-58	N/A
RAR-856	9T5124472	RN_-64	1.000	1.250	6.000	0.950	1.000	IRSN-63	CLP-510	N/A
RAL-856	9T5114472	RN_-64	1.000	1.250	6.000	0.950	1.000	IRSN-63	CLP-510	N/A
RAR-248	9T5122483	RN_-86	1.500	1.500	7.000	1.200	1.500	IRSN-84	CLP-612	N/A
RAL-248	9T5112483	RN_-86	1.500	1.500	7.000	1.200	1.500	IRSN-84	CLP-612	N/A

## SBL/R

### 15° Holder for 90° Square



RH SHOWN



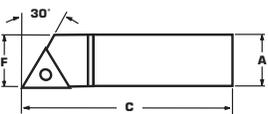
Most holders available with coolant port  
(ie: Add CP to end of description)

#### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock		Seat
								Seat	Pin	Screw
SBR-124	9T5171256	SN_-43	0.750	0.750	4.500	0.870	0.630	ISSN-432	CLP-36	N/A
SBL-124	9T5161256	SN_-43	0.750	0.750	4.500	0.870	0.630	ISSN-432	CLP-36	N/A
SBR-164	9T5171656	SN_-43	1.000	1.000	6.000	0.870	0.780	ISSN-432	CLP-38	N/A
SBL-164	9T5161656	SN_-43	1.000	1.000	6.000	0.870	0.780	ISSN-432	CLP-38	N/A
SBR-206	9T5172072	SN_-64	1.250	1.250	7.000	1.250	1.030	ISSN-632	CLP-510	N/A
SBL-206	9T5162072	SN_-64	1.250	1.250	7.000	1.250	1.030	ISSN-632	CLP-510	N/A

## TAL/R

### 30° Holder for 60° Triangle



RH SHOWN



Most holders available with coolant port  
(ie: Add CP to end of description)

#### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock		Seat
								Seat	Pin	Screw
TAR-103	9T8521048	TN_-32	0.625	0.625	4.500	0.780	0.640	ITSN-324	CLP-25	N/A
TAL-103	9T8501048	TN_-32	0.625	0.625	4.500	0.780	0.640	ITSN-324	CLP-25	N/A
TAR-123	9T8521248	TN_-32	0.750	0.750	4.500	0.780	0.770	ITSN-324	CLP-25	N/A
TAL-123	9T8501248	TN_-32	0.750	0.750	4.500	0.780	0.770	ITSN-324	CLP-25	N/A
TAR-164	9T8521656	TN_-43	1.000	1.000	6.000	1.000	1.030	ITSN-435	CLP-38	N/A
TAL-164	9T8501656	TN_-43	1.000	1.000	6.000	1.000	1.030	ITSN-435	CLP-38	N/A
TAR-854	9T8524456	TN_-43	1.000	1.250	6.000	1.000	1.030	ITSN-435	CLP-310	N/A
TAL-854	9T8504456	TN_-43	1.000	1.250	6.000	1.000	1.030	ITSN-435	CLP-310	N/A
TAR-165	9T8521664	TN_-54	1.000	1.000	6.000	1.190	1.030	ITSN-535	CLP-48	N/A
TAL-165	9T8501664	TN_-54	1.000	1.000	6.000	1.190	1.030	ITSN-535	CLP-48	N/A
TAR-205	9T8522064	TN_-54	1.250	1.250	7.000	1.190	1.280	ITSN-535	CLP-410	N/A
TAL-205	9T8502064	TN_-54	1.250	1.250	7.000	1.190	1.280	ITSN-535	CLP-410	N/A
TAR-855	9T8524464	TN_-54	1.000	1.250	6.000	1.190	1.030	ITSN-535	CLP-410	N/A
TAL-855	9T8504464	TN_-54	1.000	1.250	6.000	1.190	1.030	ITSN-535	CLP-410	N/A

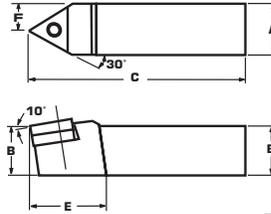


# TURNING

## TE

### 30° Holder for 60° Triangle

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

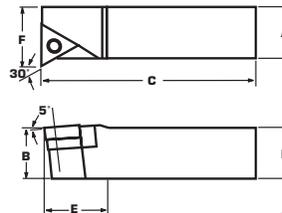
#### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock		Seat
								Seat	Pin	Screw
TE-103	9T8621048	TN_-32	0.625	0.625	4.500	0.730	0.375	ITSN-324	CLP-25	N/A
TE-124	9T8621248	TN_-43	0.750	0.750	4.500	1.020	0.375	ITSN-434	CLP-36	N/A
TE-164	9T8621656	TN_-43	1.000	1.000	6.000	1.020	0.500	ITSN-434	CLP-38	N/A
TE-205	9T8622064	TN_-54	1.250	1.250	7.000	1.150	0.625	ITSN-534	CLP-410	N/A
TE-246	9T8622476	TN_-66	1.500	1.500	8.000	1.340	0.750	ITSN-637	CLP-512T	N/A

## TFL/R

### 30° Holder for 60° Triangle

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

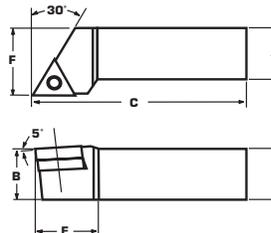
#### PARTS

Description	EDP Code	Insert	A	B	C	E	F	Lock		Seat
								Seat	Pin	Screw
TFR-164	9T8681656	TN_-43	1.000	1.000	6.000	1.000	1.240	ITSN-434	CLP-38	N/A
TFL-164	9T8661656	TN_-43	1.000	1.000	6.000	1.000	1.240	ITSN-434	CLP-38	N/A
TFR-205	9T8682064	TN_-54	1.250	1.250	7.000	1.190	1.470	ITSN-534	CLP-410	N/A
TFL-205	9T8662064	TN_-54	1.250	1.250	7.000	1.190	1.470	ITSN-534	CLP-410	N/A
TFR-245	9T8682464	TN_-54	1.500	1.500	7.000	1.190	1.720	ITSN-537	CLP-412T	N/A
TFL-245	9T8662464	TN_-54	1.500	1.500	7.000	1.190	1.720	ITSN-537	CLP-412T	N/A
TFR-246	9T8682476	TN_-66	1.500	1.500	7.000	N/A	1.730	ITSN-637	CLP-512T	N/A
TFL-246	9T8662476	TN_-66	1.500	1.500	7.000	N/A	1.730	ITSN-637	CLP-512T	N/A

## TGL/R

### 30° Holder for 60° Triangle

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

#### PARTS

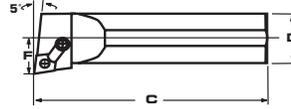
Description	EDP Code	Insert	A	B	C	E	F	Lock		Seat
								Seat	Pin	Screw
TGR-123	9T8741248	TN_-32	0.750	0.750	4.500	0.900	1.020	ITSN-324	CLP-25	N/A
TGL-123	9T8721248	TN_-32	0.750	0.750	4.500	0.900	1.020	ITSN-324	CLP-25	N/A
TGR-164	9T8741656	TN_-43	1.000	1.000	6.000	1.140	1.280	ITSN-435	CLP-38	N/A
TGL-164	9T8721656	TN_-43	1.000	1.000	6.000	1.140	1.280	ITSN-435	CLP-38	N/A
TGR-854	9T8744456	TN_-43	1.000	1.250	6.000	1.140	1.280	ITSN-435	CLP-310	N/A
TGL-854	9T8724456	TN_-43	1.000	1.250	6.000	1.140	1.280	ITSN-435	CLP-310	N/A
TGR-165	9T8741664	TN_-54	1.000	1.000	6.000	1.310	1.280	ITSN-535	CLP-48	N/A
TGL-165	9T8721664	TN_-54	1.000	1.000	6.000	1.310	1.280	ITSN-535	CLP-48	N/A
TGR-205	9T8742064	TN_-54	1.250	1.250	7.000	1.310	1.530	ITSN-535	CLP-410	N/A
TGL-205	9T8722064	TN_-54	1.250	1.250	7.000	1.310	1.530	ITSN-535	CLP-410	N/A
TGR-245	9T8742464	TN_-54	1.500	1.500	7.000	1.310	1.780	ITSN-535	CLP-412	N/A
TGL-245	9T8722464	TN_-54	1.500	1.500	7.000	1.310	1.780	ITSN-535	CLP-412	N/A
TGR-246	9T8742476	TN_-66	1.500	1.500	7.000	1.480	1.790	ITSN-637	CLP-512T	N/A
TGL-246	9T8722476	TN_-66	1.500	1.500	7.000	1.480	1.790	ITSN-637	CLP-512T	N/A

# TURNING



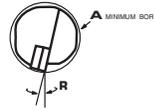
## SI-MCLNL/R

5° Bar for 80° Diamond



RH SHOWN

Most bars available with coolant port  
(ie: Add CP to end of description)

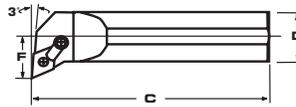


### PARTS

Description	EDP Code	Insert	A	C	D	F	R	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
SI-MCLNR-164	9T6761656	CN_-43	1.280	12.000	1.000	0.640	14°	N/A	NL-44	CL-20	XNS-47	N/A	
SI-MCLNL-164	9T6741656	CN_-43	1.280	12.000	1.000	0.640	14°	N/A	NL-44	CL-20	XNS-47	N/A	
SI-MCLNR-204	9T6762056	CN_-43	1.530	14.000	1.250	0.765	14°	N/A	NL-44	CL-20	XNS-47	N/A	
SI-MCLNL-204	9T6742056	CN_-43	1.530	14.000	1.250	0.765	14°	N/A	NL-44	CL-20	XNS-47	N/A	
SI-MCLNR-244	9T6762456	CN_-43	1.780	14.000	1.500	0.890	14°	ICSN-432	NL-46	CL-20	XNS-47	S-46	
SI-MCLNL-244	9T6742456	CN_-43	1.780	14.000	1.500	0.890	14°	ICSN-432	NL-46	CL-20	XNS-47	S-46	
SI-MCLNR-284	9T6762856	CN_-43	2.030	14.000	1.750	1.015	12°	ICSN-432	NL-46	CL-20	XNS-47	S-46	
SI-MCLNL-284	9T6742856	CN_-43	2.030	14.000	1.750	1.015	12°	ICSN-432	NL-46	CL-20	XNS-47	S-46	
SI-MCLNR-325	9T6763264	CN_-54	2.562	16.000	2.000	1.281	12°	ICSN-533	NL-58	CL-12	XNS-510	S-58	
SI-MCLNL-325	9T6743264	CN_-54	2.562	16.000	2.000	1.281	12°	ICSN-533	NL-58	CL-12	XNS-510	S-58	
SI-MCLNR-326	9T6763272	CN_-64	2.562	16.000	2.000	1.281	12°	ICSN-633	NL-68	CL-12	XNS-510	S-68	
SI-MCLNL-326	9T6743272	CN_-64	2.562	16.000	2.000	1.281	12°	ICSN-633	NL-68	CL-12	XNS-510	S-68	
SI-MCLNR-406	9T6764072	CN_-64	3.062	16.000	2.500	1.531	10°	ICSN-633	NL-68	CL-12	XNS-510	S-68	
SI-MCLNL-406	9T6744072	CN_-64	3.062	16.000	2.500	1.531	10°	ICSN-633	NL-68	CL-12	XNS-510	S-68	

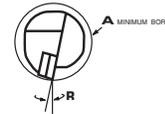
## SI-MDJNL/R

3° Bar for 55° Diamond



RH SHOWN

Most bars available with coolant port  
(ie: Add CP to end of description)

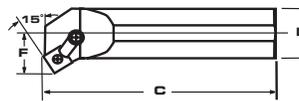


### PARTS

Description	EDP Code	Insert	A	C	D	F	R	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
SI-MDJNR-204	9T6822056	DN_-43	2.000	14.000	1.250	1.000	10°	IDSN-433	NL-46	CL-20	XNS-59	S-46	
SI-MDJNL-204	9T6802056	DN_-43	2.000	14.000	1.250	1.000	10°	IDSN-433	NL-46	CL-20	XNS-59	S-46	
SI-MDJNR-244	9T6822456	DN_-43	2.250	14.000	1.500	1.125	10°	IDSN-433	NL-46	CL-12	XNS-59	S-46	
SI-MDJNL-244	9T6802456	DN_-43	2.250	14.000	1.500	1.125	10°	IDSN-433	NL-46	CL-12	XNS-59	S-46	
SI-MDJNR-324	9T6823256	DN_-43	3.000	16.000	2.000	1.500	10°	IDSN-433	NL-46	CL-12	XNS-59	S-46	
SI-MDJNL-324	9T6803256	DN_-43	3.000	16.000	2.000	1.500	10°	IDSN-433	NL-46	CL-12	XNS-59	S-46	
SI-MDJNR-325	9T6823264	DN_-54	3.000	16.000	2.000	1.500	10°	IDSN-533	NL-58	CL-12	XNS-510	S-58	
SI-MDJNL-325	9T6803264	DN_-54	3.000	16.000	2.000	1.500	10°	IDSN-533	NL-58	CL-12	XNS-510	S-58	

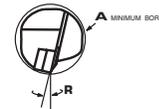
## SI-MSKNL/R

15° Bar for 90° Square



RH SHOWN

Most bars available with coolant port  
(ie: Add CP to end of description)



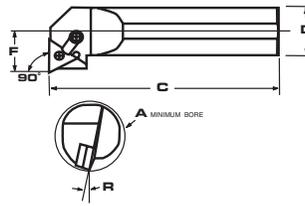
### PARTS

Description	EDP Code	Insert	A	C	D	F	R	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
SI-MSKNR-204	9T7002056	SN_-43	1.530	14.000	1.250	0.765	12°	N/A	NL-44	CL-9	XNS-59	N/A	
SI-MSKNL-204	9T6982056	SN_-43	1.530	14.000	1.250	0.765	12°	N/A	NL-44	CL-9	XNS-59	N/A	
SI-MSKNR-244	9T7002456	SN_-43	1.780	14.000	1.500	0.890	12°	ISSN-433	NL-46	CL-9	XNS-59	S-46	
SI-MSKNL-244	9T6982456	SN_-43	1.780	14.000	1.500	0.890	12°	ISSN-433	NL-46	CL-9	XNS-59	S-46	
SI-MSKNR-284	9T7002856	SN_-43	2.030	14.000	1.750	1.015	12°	ISSN-433	NL-46	CL-9	XNS-59	S-46	
SI-MSKNL-284	9T6982856	SN_-43	2.030	14.000	1.750	1.015	12°	ISSN-433	NL-46	CL-9	XNS-59	S-46	
SI-MSKNR-325	9T7003264	SN_-54	2.562	16.000	2.000	1.281	12°	ISSN-533	NL-58	CL-12	XNS-510	S-58	
SI-MSKNL-325	9T6983264	SN_-54	2.562	16.000	2.000	1.281	12°	ISSN-533	NL-58	CL-12	XNS-510	S-58	
SI-MSKNR-405	9T7004064	SN_-54	3.062	16.000	2.500	1.531	10°	ISSN-533	NL-58	CL-12	XNS-510	S-58	
SI-MSKNL-405	9T6984064	SN_-54	3.062	16.000	2.500	1.531	10°	ISSN-533	NL-58	CL-12	XNS-510	S-58	
SI-MSKNR-485	9T7004864	SN_-54	3.562	22.000	3.000	1.781	10°	ISSN-533	NL-58	CL-12	XNS-510	S-58	
SI-MSKNL-485	9T6984864	SN_-54	3.562	22.000	3.000	1.781	10°	ISSN-533	NL-58	CL-12	XNS-510	S-58	



# TURNING

## SI-MTFNL/R 90° Bar for 60° Triangle



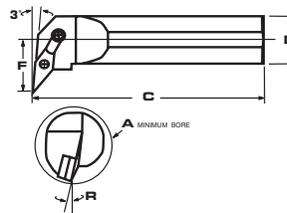
RH SHOWN

Most bars available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	A	C	D	F	R	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
SI-MTFNR-163	9T7061649	TN_-33	1.280	12.000	1.000	0.640	12°	N/A	NL-33L	CL-9	XNS-59	N/A	
SI-MTFNL-163	9T7041649	TN_-33	1.280	12.000	1.000	0.640	12°	N/A	NL-33L	CL-9	XNS-59	N/A	
SI-MTFNR-203	9T7062049	TN_-33	1.530	14.000	1.250	0.765	12°	N/A	NL-33L	CL-9	XNS-59	N/A	
SI-MTFNL-203	9T7042049	TN_-33	1.530	14.000	1.250	0.765	12°	N/A	NL-33L	CL-9	XNS-59	N/A	
SI-MTFNR-244	9T7062456	TN_-43	2.062	14.000	1.500	1.031	10°	ITSN-433	NL-46	CL-9	XNS-59	S-46	
SI-MTFNL-244	9T7042456	TN_-43	2.062	14.000	1.500	1.031	10°	ITSN-433	NL-46	CL-9	XNS-59	S-46	
SI-MTFNR-284	9T7062856	TN_-43	2.312	14.000	1.750	1.156	10°	ITSN-433	NL-46	CL-9	XNS-59	S-46	
SI-MTFNL-284	9T7042856	TN_-43	2.312	14.000	1.750	1.156	10°	ITSN-433	NL-46	CL-9	XNS-59	S-46	
SI-MTFNR-324	9T7063256	TN_-43	2.562	16.000	2.000	1.281	8°	ITSN-433	NL-46	CL-9	XNS-59	S-46	
SI-MTFNL-324	9T7043256	TN_-43	2.562	16.000	2.000	1.281	8°	ITSN-433	NL-46	CL-9	XNS-59	S-46	
SI-MTFNR-404	9T7064056	TN_-43	3.062	16.000	2.500	1.531	8°	ITSN-433	NL-46	CL-9	XNS-59	S-46	
SI-MTFNL-404	9T7044056	TN_-43	3.062	16.000	2.500	1.531	8°	ITSN-433	NL-46	CL-9	XNS-59	S-46	

## SI-MVJNL/R 3° Bar for 35° Diamond



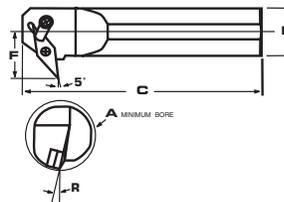
RH SHOWN

Most bars available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	A	C	D	F	R	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
SI-MVJNR-203	9T7122049	VN_-33	2.250	14.000	1.250	1.125	12°	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
SI-MVJNL-203	9T7102049	VN_-33	2.250	14.000	1.250	1.125	12°	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
SI-MVJNR-243	9T7122449	VN_-33	2.500	14.000	1.500	1.250	12°	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
SI-MVJNL-243	9T7102449	VN_-33	2.500	14.000	1.500	1.250	12°	IVSN-324	NL-34L	CL-30	XNS-510	S-34	
SI-MVJNR-284	9T7122856	VN_-43	3.000	14.000	1.750	1.500	12°	IVSN-433	NL-46	CL-12	XNS-510	S-46	
SI-MVJNL-284	9T7102856	VN_-43	3.000	14.000	1.750	1.500	12°	IVSN-433	NL-46	CL-12	XNS-510	S-46	
SI-MVJNR-324	9T7123256	VN_-43	3.250	16.000	2.000	1.625	12°	IVSN-433	NL-46	CL-12	XNS-510	S-46	
SI-MVJNL-324	9T7103256	VN_-43	3.250	16.000	2.000	1.625	12°	IVSN-433	NL-46	CL-12	XNS-510	S-46	
SI-MVJNR-404	9T7124056	VN_-43	3.750	16.000	2.500	1.875	12°	IVSN-433	NL-46	CL-12	XNS-510	S-46	
SI-MVJNL-404	9T7104056	VN_-43	3.750	16.000	2.500	1.875	12°	IVSN-433	NL-46	CL-12	XNS-510	S-46	

## SI-MVLNL/R 5° Bar for 35° Diamond



RH SHOWN

Most bars available with coolant port  
(ie: Add CP to end of description)

### PARTS

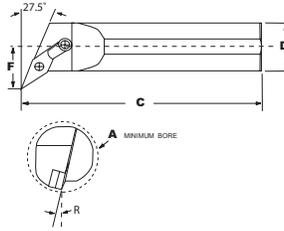
Description	EDP Code	Insert	A	C	D	F	R	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
SI-MVLNR-243	9T7162449	VN_-33	2.250	14.000	1.500	1.125	12°	IVSN-324	NL-34L	CL-20	XNS-47	S-34	
SI-MVLNL-243	9T7142449	VN_-33	2.250	14.000	1.500	1.125	12°	IVSN-324	NL-34L	CL-20	XNS-47	S-34	
SI-MVLNR-283	9T7162849	VN_-33	2.500	14.000	1.750	1.375	12°	IVSN-324	NL-34L	CL-12	XNS-47	S-34	
SI-MVLNL-283	9T7142849	VN_-33	2.500	14.000	1.750	1.250	12°	IVSN-324	NL-34L	CL-12	XNS-47	S-34	
SI-MVLNR-324	9T7163256	VN_-43	3.000	16.000	2.000	1.375	12°	IVSN-433	NL-46	CL-12	XNS-510	S-46	
SI-MVLNL-324	9T7143256	VN_-43	3.000	16.000	2.000	1.500	12°	IVSN-433	NL-46	CL-12	XNS-510	S-46	
SI-MVLNR-364	9T7163656	VN_-43	3.250	16.000	2.250	1.500	12°	IVSN-433	NL-46	CL-12	XNS-510	S-46	
SI-MVLNL-364	9T7143656	VN_-43	3.250	16.000	2.250	1.500	12°	IVSN-433	NL-46	CL-12	XNS-510	S-46	

# TURNING



## SI-MVPNL/R

27.5° Bar for 35° Diamond



RH SHOWN

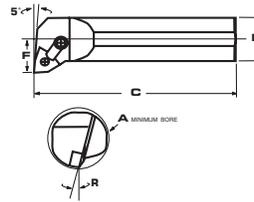
Most bars available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	A	C	D	F	R	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
SI-MVPNR-203	9T7222049	VN__-33	1.750	14.000	1.250	0.875	12°	IVSN-324	NL-34L	CL-30	XNS-58	S-34	
SI-MVPNL-203	9T7202049	VN__-33	1.750	14.000	1.250	0.875	12°	IVSN-324	NL-34L	CL-30	XNS-58	S-34	
SI-MVPNR-323	9T7223249	VN__-33	2.500	16.000	2.000	1.250	12°	IVSN-324	NL-34L	CL-30	XNS-58	S-34	
SI-MVPNL-323	9T7203249	VN__-33	2.500	16.000	2.000	1.250	12°	IVSN-324	NL-34L	CL-30	XNS-58	S-34	

## SI-MWLNL/R

5° Bar for 80° Trigon



RH SHOWN

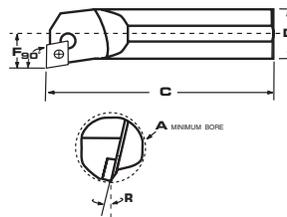
Most bars available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	A	C	D	F	R	Lock			Clamp		Seat
								Seat	Pin	Clamp	Screw	Screw	
SI-MWLNR-123	9T7301249	WN__-33	0.930	10.000	0.750	0.500	14°	N/A	NL-33L	CL-6	XNS-36	N/A	
SI-MWLNL-123	9T7281249	WN__-33	0.930	10.000	0.750	0.500	14°	N/A	NL-33L	CL-6	XNS-36	N/A	
SI-MWLNR-163	9T7301649	WN__-33	1.200	12.000	1.000	0.640	14°	N/A	NL-33L	CL-6	XNS-36	N/A	
SI-MWLNL-163	9T7281649	WN__-33	1.200	12.000	1.000	0.640	14°	N/A	NL-33L	CL-6	XNS-36	N/A	
SI-MWLNR-203	9T7302049	WN__-33	1.470	14.000	1.250	0.765	14°	IWSN-323	NL-34L	CL-6	XNS-36	N/A	
SI-MWLNL-203	9T7282049	WN__-33	1.470	14.000	1.250	0.765	14°	IWSN-323	NL-34L	CL-6	XNS-36	N/A	
SI-MWLNR-164	9T7301656	WN__-43	1.280	12.000	1.000	0.640	14°	N/A	NL-44	CL-20	XNS-47	N/A	
SI-MWLNL-164	9T7281656	WN__-43	1.280	12.000	1.000	0.640	14°	N/A	NL-44	CL-20	XNS-47	N/A	
SI-MWLNR-204	9T7302056	WN__-43	1.530	14.000	1.250	0.765	14°	IWSN-433	NL-46	CL-20	XNS-47	N/A	
SI-MWLNL-204	9T7282056	WN__-43	1.530	14.000	1.250	0.765	14°	IWSN-433	NL-46	CL-20	XNS-47	N/A	

## S-SCFCL/R

90° Bar for 80° Diamond



RH SHOWN

Most bars available with coolant port  
(ie: Add CP to end of description)

### PARTS

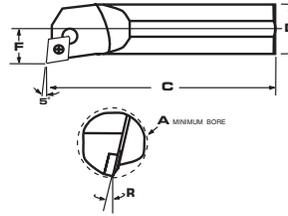
Description	EDP Code	Insert	A	C	D	F	R	Insert	
								Screw	Screw
S06-SCFCR-2	9T5220640	CC__-21.5	0.510	6.000	0.375	0.250	11°	C02506	C02506
S06-SCFCL-2	9T5230640	CC__-21.5	0.510	6.000	0.375	0.250	11°	C02506	C02506
S08-SCFCR-3	9T5220848	CC__-32.5	0.625	8.000	0.500	0.313	9°	C04008	C04008
S08-SCFCL-3	9T5230848	CC__-32.5	0.625	8.000	0.500	0.313	9°	C04008	C04008



# TURNING

## S -SCLCL/R

5° Bar for 80° Diamond



RH SHOWN

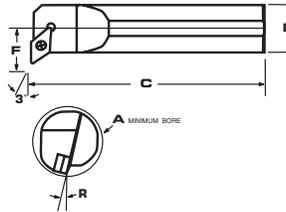
Most bars available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	A	C	D	F	R	Insert Screw
S06-SCLCR-2	9T5320640	CC_-21.5	0.500	6.000	0.375	0.250	11°	C02506
S06-SCLCL-2	9T5300640	CC_-21.5	0.500	6.000	0.375	0.250	11°	C02506
S08-SCLCR-2	9T5320840	CC_-21.5	0.625	8.000	0.500	0.313	9°	C02506
S08-SCLCL-2	9T5300840	CC_-21.5	0.625	8.000	0.500	0.313	9°	C02506
S10-SCLCR-2	9T5321040	CC_-21.5	0.812	10.000	0.625	0.406	7°	C02506
S10-SCLCL-2	9T5301040	CC_-21.5	0.812	10.000	0.625	0.406	7°	C02506
S08-SCLCR-3	9T5320848	CC_-32.5	0.625	8.000	0.500	0.313	9°	C04008
S08-SCLCL-3	9T5300848	CC_-32.5	0.625	8.000	0.500	0.313	9°	C04008
S10-SCLCR-3	9T5321048	CC_-32.5	0.812	10.000	0.625	0.406	7°	C04008
S10-SCLCL-3	9T5301048	CC_-32.5	0.812	10.000	0.625	0.406	7°	C04008
S12-SCLCR-3	9T5321248	CC_-32.5	1.000	10.000	0.750	0.500	10°	C04008
S12-SCLCL-3	9T5301248	CC_-32.5	1.000	10.000	0.750	0.500	10°	C04008
S16-SCLCR-3	9T5321648	CC_-32.5	1.250	12.000	1.000	0.625	5°	C04008
S16-SCLCL-3	9T5301648	CC_-32.5	1.250	12.000	1.000	0.625	5°	C04008

## S -SDUCL/R

3° Bar for 55° Diamond



RH SHOWN

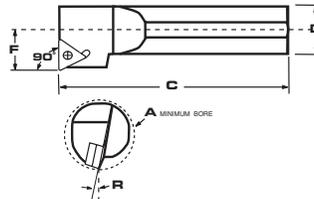
Most bars available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	A	C	D	F	R	Insert Screw
S08-SDUCR-2	9T5350840	DC_-21.5	0.780	8.000	0.500	0.437	11°	C02506
S08-SDUCL-2	9T5340840	DC_-21.5	0.780	8.000	0.500	0.437	11°	C02506
S10-SDUCR-2	9T5351040	DC_-21.5	0.840	10.000	0.625	0.500	5°	C02506
S10-SDUCL-2	9T5341040	DC_-21.5	0.840	10.000	0.625	0.500	5°	C02506
S12-SDUCR-3	9T5351248	DC_-32.5	1.125	10.000	0.750	0.562	6°	C04008
S12-SDUCL-3	9T5341248	DC_-32.5	1.125	10.000	0.750	0.562	6°	C04008
S16-SDUCR-3	9T5351648	DC_-32.5	1.500	12.000	1.000	0.750	4°	C04008
S16-SDUCL-3	9T5341648	DC_-32.5	1.500	12.000	1.000	0.750	4°	C04008

## S -STFCL/R

90° Bar for 60° Triangle



RH SHOWN

Most bars available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	A	C	D	F	R	Insert Screw
S06-STFCR-2	9T5400640	TC_-21.5	0.500	6.000	0.375	0.250	11°	C02506
S06-STFCL-2	9T5390640	TC_-21.5	0.500	6.000	0.375	0.250	11°	C02506
S08-STFCR-2	9T5400840	TC_-21.5	0.625	8.000	0.500	0.313	9°	C02506
S08-STFCL-2	9T5390840	TC_-21.5	0.625	8.000	0.500	0.313	9°	C02506
S10-STFCR-2	9T5401040	TC_-21.5	0.812	10.000	0.625	0.406	7°	C02506
S10-STFCL-2	9T5391040	TC_-21.5	0.812	10.000	0.625	0.406	7°	C02506
S12-STFCR-2	9T5401240	TC_-21.5	1.000	10.000	0.750	0.500	6°	C02506
S12-STFCL-2	9T5391240	TC_-21.5	1.000	10.000	0.750	0.500	6°	C02506

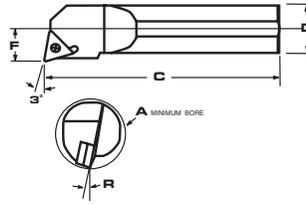
# TURNING



## S-STUCL/R

3° Bar for 60° Triangle

Most bars available with coolant port  
(ie: Add CP to end of description)



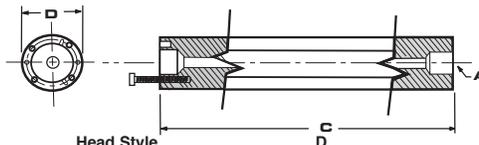
RH SHOWN

### PARTS

Description	EDP Code	Insert	A	C	D	F	R	Insert Screw
S06-STUCR-2	9T5430640	TC_-21.5	0.500	6.000	0.375	0.250	11°	C02506
S06-STUCL-2	9T5420640	TC_-21.5	0.500	6.000	0.375	0.250	11°	C02506
S08-STUCR-2	9T5430840	TC_-21.5	0.625	8.000	0.500	0.313	9°	C02506
S08-STUCL-2	9T5420840	TC_-21.5	0.625	8.000	0.500	0.313	9°	C02506
S10-STUCR-2	9T5431040	TC_-21.5	0.812	10.000	0.625	0.406	7°	C02506
S10-STUCL-2	9T5421040	TC_-21.5	0.812	10.000	0.625	0.406	7°	C02506
S12-STUCR-3	9T5431248	TC_-32.5	1.000	10.000	0.750	0.500	6°	C04008
S12-STUCL-3	9T5421248	TC_-32.5	1.000	10.000	0.750	0.500	6°	C04008
S16-STUCR-3	9T5431648	TC_-32.5	1.280	12.000	1.000	0.640	4°	C04008
S16-STUCL-3	9T5421648	TC_-32.5	1.280	12.000	1.000	0.640	4°	C04008

## S-4400W

Steel Shank with Through Coolant

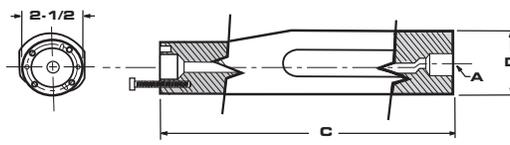


### PARTS

Description	EDP Code	Head Style	D	C	A	Screw (4 req/d)
S-4416W	9IBS4416W	H16-	1.000	9.000	1/4 - 18NPT	SS61
S-4420W	9IBS4420W	H20-	1.250	9.000	3/8 - 18NPT	SS81
S-4424W	9IBS4424W	H24-	1.500	10.000	3/8 - 18NPT	SS85
S-4428W	9IBS4428W	H28-	1.750	12.000	3/8 - 18NPT	SS100
S-4432W	9IBS4432W	H32-	2.000	13.000	3/8 - 18NPT	SS100
S-4436W	9IBS4436W	H36-	2.250	15.000	3/8 - 18NPT	SS100
S-4440W	9IBS4440W	H40-	2.500	17.000	3/8 - 18NPT	SS83

## S-4400W48

Steel Shank with Through Coolant

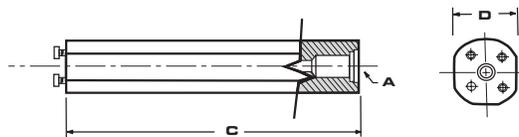


### PARTS

Description	EDP Code	Head Style	D	C	A	Screw (4 req/d)
S-4440W48	9IBS4440W48	H40-	3.000	18.000	3/8 - 18NPT	SS89

## S-570

Steel Shank with Through Coolant



### PARTS

Description	EDP Code	Head Style	D	C	A	Screw (4 req/d)
S-570-10-16	9IBS5701016	HS16-	0.625	4.210	1/8 - 27NPT	SS62
S-570-12-20	9IBS5701220	HS20-	0.750	5.200	1/4 - 18NPT	SS63
S-570-16-25	9IBS5701625	HS25-	1.000	7.200	1/4 - 18NPT	SS64
S-570-20-32	9IBS5702032	HS32-	1.250	8.740	3/8 - 18NPT	SS81
S-570-24-40	9IBS5702440	HS40-	1.500	10.750	1/2 - 14NPT	SS100
S-570-32-50	9IBS5703250	HS50-	2.000	14.410	1/2 - 14NPT	SS94
S-570-40-60	9IBS5704060	HS60-	2.500	18.430	1/2 - 14NPT	SS95

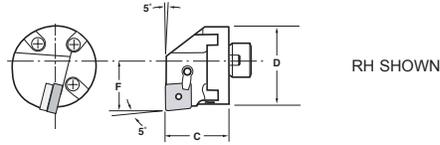


# TURNING

## H-MCLNL/R\*

5° Head for 80° Diamond

Most heads available with coolant port  
(ie: Add CP to end of description)



### PARTS

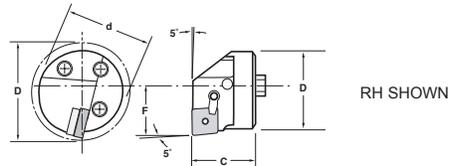
Description	EDP Code	Insert	D	C	F	Min. Bore	Lock			Clamp		Seat
							Seat	Pin	Clamp	Screw	Screw	
H16-MCLNR-4	9IHT2801656	CN_-43	1.000	1.625	0.640	1.200	N/A	NL-44	CL-20	XNS-47	N/A	
H20-MCLNR-4	9IHT2802056	CN_-43	1.250	1.625	0.765	1.470	ICSN-433	NL-46	CL-20	XNS-47	S-46	
H24-MCLNR-4	9IHT2802456	CN_-43	1.500	1.625	0.890	1.760	ICSN-433	NL-46	CL-20	XNS-47	S-46	
H28-MCLNR-4	9IHT2802856	CN_-43	1.750	1.625	1.015	2.010	ICSN-433	NL-46	CL-20	XNS-47	S-46	
H32-MCLNR-5	9IHT2803264	CN_-54	2.000	1.625	1.281	2.400	ICSN-533	NL-58	CL-12	XNS-510	S-58	
H32-MCLNR-6	9IHT2803272	CN_-64	2.000	1.625	1.281	2.400	ICSN-633	NL-68	CL-12	XNS-510	S-68	
H40-MCLNR-6	9IHT2804072	CN_-64	2.500	1.625	1.531	3.030	ICSN-633	NL-68	CL-12	XNS-510	S-68	

\*Left hand quoted on request.

## HS-MCLNL/R\*

5° Head for 80° Diamond (570 Type)

Most heads available with coolant port  
(ie: Add CP to end of description)



### PARTS

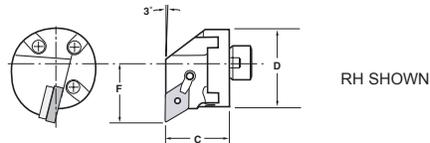
Description	EDP Code	Insert	D	C	F	Min. Bore	Lock			Clamp		Seat
							Seat	Pin	Clamp	Screw	Screw	
HS32-MCLNR-4	9IHST28032M56	CN_-43	1.260	1.260	0.866	1.570	ICSN-433	NL-46	CL-20	XNS-47	S-46	
HS40-MCLNR-4	9IHST28040M56	CN_-43	1.575	1.260	1.063	1.970	ICSN-433	NL-46	CL-20	XNS-47	S-46	
HS50-MCLNR-5	9IHST28050M64	CN_-54	1.969	1.570	1.378	2.480	ICSN-533	NL-58	CL-12	XNS-510	S-58	
HS50-MCLNR-6	9IHST28050M72	CN_-64	1.969	1.570	1.378	2.480	ICSN-633	NL-68	CL-12	XNS-510	S-68	
HS60-MCLNR-6	9IHST28060M72	CN_-64	2.362	1.570	1.693	3.150	ICSN-633	NL-68	CL-12	XNS-510	S-68	

\*Left hand quoted on request.

## H-MDUNL/R\*

3° Head for 55° Diamond

Most heads available with coolant port  
(ie: Add CP to end of description)



### PARTS

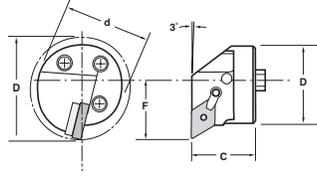
Description	EDP Code	Insert	D	C	F	Min. Bore	Lock			Clamp		Seat
							Seat	Pin	Clamp	Screw	Screw	
H16-MDUNR-3	9IHT6821648	DN_-33	1.000	1.625	0.750	1.300	N/A	NL-33L	CL-7	XNS-47	N/A	
H24-MDUNR-3	9IHT6822448	DN_-33	1.500	1.625	1.125	2.000	IDSN-322	NL-34L	CL-7	XNS-47	S-34	
H32-MDUNR-3	9IHT6823248	DN_-33	2.000	1.625	1.320	2.500	IDSN-322	NL-34L	CL-7	XNS-47	S-34	
H40-MDUNR-3	9IHT6824048	DN_-33	2.500	1.625	1.750	3.250	IDSN-322	NL-34L	CL-7	XNS-47	S-34	
H20-MDUNR-4	9IHT6822056	DN_-43	1.250	1.625	1.000	1.705	IDSN-443	NL-46L	CL-20	XNS-59	S-46	
H24-MDUNR-4	9IHT6822456	DN_-43	1.500	1.625	1.125	2.000	IDSN-443	NL-46L	CL-12	XNS-59	S-46	
H28-MDUNR-4	9IHT6822856	DN_-43	1.750	1.625	1.250	2.250	IDSN-443	NL-46L	CL-12	XNS-59	S-46	
H32-MDUNR-4	9IHT6823256	DN_-43	2.000	1.625	1.370	2.500	IDSN-443	NL-46L	CL-12	XNS-59	S-46	
H36-MDUNR-4	9IHT6823656	DN_-43	2.250	1.625	1.495	2.870	IDSN-443	NL-46L	CL-12	XNS-59	S-46	
H40-MDUNR-4	9IHT6824056	DN_-43	2.500	1.625	1.750	3.250	IDSN-443	NL-46L	CL-12	XNS-59	S-46	

\*Left hand quoted on request.



## HS-MDUNL/R\*

3° Head for 55° Diamond (570 Type)



RH SHOWN

Most heads available with coolant port  
(ie: Add CP to end of description)

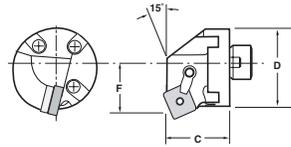
### PARTS

Description	EDP Code	Insert	D	C	F	Min. Bore	Lock			Clamp		Seat
							Seat	Pin	Clamp	Screw	Screw	
HS40-MDUNR-4	9IHST68240M56	DN_-43	1.575	1.260	1.063	1.970	IDSN-433	NL-46	CL-12	XNS-59	S-46	
HS50-MDUNR-4	9IHST68240M56	DN_-43	1.969	1.570	1.378	2.480	IDSN-433	NL-46	CL-12	XNS-59	S-46	
HS60-MDUNR-4	9IHST68240M56	DN_-43	2.362	1.570	1.683	2.480	IDSN-433	NL-46	CL-12	XNS-59	S-46	

\*Left hand quoted on request.

## H-MSKNL/R\*

15° Head for 90° Square



RH SHOWN

Most heads available with coolant port  
(ie: Add CP to end of description)

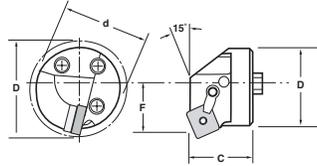
### PARTS

Description	EDP Code	Insert	D	C	F	Min. Bore	Lock			Clamp		Seat
							Seat	Pin	Clamp	Screw	Screw	
H20-MSKNR-4	9IHT7002056	SN_-43	1.250	1.625	0.765	1.470	N/A	NL-44	CL-9	XNS-59	N/A	
H24-MSKNR-4	9IHT7002456	SN_-43	1.500	1.625	0.890	1.760	ISSN-433	NL-46	CL-9	XNS-59	S-46	
H28-MSKNR-4	9IHT7002856	SN_-43	1.750	1.625	1.015	2.010	ISSN-433	NL-46	CL-9	XNS-59	S-46	
H32-MSKNR-4	9IHT7003256	SN_-43	2.000	1.625	1.281	2.400	ISSN-433	NL-46	CL-9	XNS-59	S-46	
H40-MSKNR-6	9IHT7004064	SN_-64	2.500	1.625	1.625	3.030	ISSN-633	NL-68	CL-12	XNS-510	S-68	

\*Left hand quoted on request.

## HS-MSKNL/R\*

15° Head for 90° Square (570 Type)



RH SHOWN

Most heads available with coolant port  
(ie: Add CP to end of description)

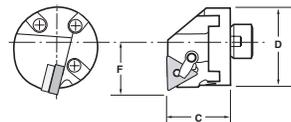
### PARTS

Description	EDP Code	Insert	D	C	F	Min. Bore	Lock			Clamp		Seat
							Seat	Pin	Clamp	Screw	Screw	
HS32-MSKNR-4	9IHST70032M56	SN_-43	1.260	1.260	0.669	1.470	N/A	NL-44	CL-9	XNS-59	N/A	
HS40-MSKNR-4	9IHST70040M56	SN_-43	1.575	1.260	0.866	1.760	ISSN-433	NL-46	CL-9	XNS-59	S-46	
HS50-MSKNR-4	9IHST70050M56	SN_-43	1.969	1.570	1.063	2.400	ISSN-433	NL-46	CL-9	XNS-59	S-46	
HS60-MSKNR-6	9IHST70060M64	SN_-64	2.362	1.570	1.378	3.030	ISSN-633	NL-68	CL-12	XNS-510	S-68	

\*Left hand quoted on request.

## H-MTFNL/R\*

90° Head for 60° Triangle



RH SHOWN

Most heads available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	D	C	F	Min. Bore	Lock			Clamp		Seat
							Seat	Pin	Clamp	Screw	Screw	
H16-MTFNR-3	9IHT7062048	TN_-33	1.000	1.625	0.640	1.220	N/A	NL-33L	CL-7	XNS-47	N/A	
H24-MTFNR-3	9IHT7062448	TN_-33	1.500	1.625	0.890	1.760	ITSN-323	NL-34L	CL-7	XNS-47	S-34	
H28-MTFNR-3	9IHT7062848	TN_-33	1.750	1.625	1.015	2.010	ITSN-323	NL-34L	CL-7	XNS-47	S-34	
H32-MTFNR-4	9IHT7063256	TN_-43	2.000	1.625	1.281	2.400	ITSN-433	NL-46	CL-9	XNS-59	S-46	
H40-MTFNR-4	9IHT7064056	TN_-43	2.500	1.625	1.531	3.030	ITSN-433	NL-46	CL-9	XNS-59	S-46	

\*Left hand quoted on request.

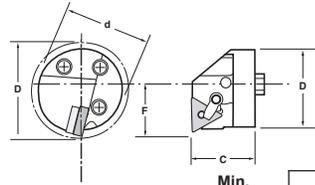


# TURNING

## HS-MTFNL/R\*

90° Head for 60° Triangle (570 Type)

Most heads available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

### PARTS

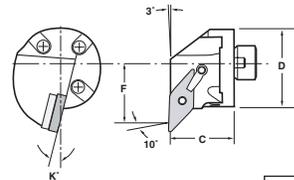
Description	EDP Code	Insert	D	C	F	Min. Bore	Lock		Clamp		Seat	
							Seat	Pin	Clamp	Screw	Screw	Screw
HS25-MTFNR-3	9IHST70625M48	TN_-33	0.984	1.260	0.866	1.570	N/A	NL-33L	CL-7	XNS-47	N/A	N/A
HS40-MTFNR-3	9IHST70640M48	TN_-33	1.575	1.260	1.062	1.970	ITSN-323	NL-34L	CL-7	XNS-47	S-34	S-34
HS50-MTFNR-4	9IHST70650M56	TN_-43	1.969	1.570	1.380	2.480	ITSN-433	NL-46	CL-9	XNS-59	S-46	S-46
HS60-MTFNR-4	9IHST70660M56	TN_-43	2.362	1.570	1.693	3.150	ITSN-433	NL-46	CL-9	XNS-59	S-46	S-46

\*Left hand quoted on request.

## H-MVUNL/R\*

3° Head for 35° Diamond

Most heads available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

### PARTS

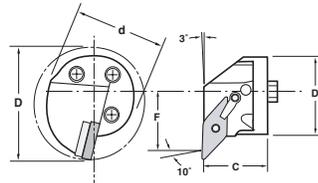
Description	EDP Code	Insert	D	C	F	Min. Bore	Lock		Clamp		Seat	
							Seat	Pin	Clamp	Screw	Screw	Screw
H20-MVUNR-3	9IHT7122049	VN_-33	1.000	1.625	1.000	1.705	IVSN-322	NL-34L	CL-30	XNS-510	S-34	S-34
H24-MVUNR-3	9IHT7122449	VN_-33	1.500	1.625	1.125	2.000	IVSN-322	NL-34L	CL-30	XNS-510	S-34	S-34
H32-MVUNR-3	9IHT7123249	VN_-33	2.000	1.625	1.325	2.500	IVSN-322	NL-34L	CL-30	XNS-510	S-34	S-34
H40-MVUNR-3	9IHT7124049	VN_-43	2.500	1.625	1.750	3.250	IVSN-322	NL-34L	CL-30	XNS-510	S-34	S-34
H32-MVUNR-4	9IHT7123256	VN_-43	2.000	1.625	1.375	2.500	IVSN-433	NL-46	CL-12	XNS-510	S-46	S-46
H40-MVUNR-4	9IHT7124056	VN_-43	2.500	1.625	1.750	3.250	IVSN-433	NL-46	CL-12	XNS-510	S-46	S-46

\*Left hand quoted on request.

## HS-MVUNL/R\*

3° Head for 35° Diamond (570 Type)

Most heads available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

### PARTS

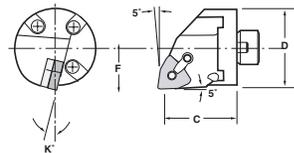
Description	EDP Code	Insert	D	C	F	Min. Bore	Lock		Clamp		Seat	
							Seat	Pin	Clamp	Screw	Screw	Screw
HS32-MVUNR-3	9IHT71232M49	VN_-33	1.259	1.260	1.000	1.705	IVSN-322	NL-34L	CL-30	XNS-510	S-34	S-34
HS40-MVUNR-3	9IHT71240M49	VN_-33	1.575	1.260	1.125	2.000	IVSN-322	NL-34L	CL-30	XNS-510	S-34	S-34
HS50-MVUNR-3	9IHT71250M49	VN_-33	1.969	1.570	1.750	3.250	IVSN-322	NL-34L	CL-30	XNS-510	S-34	S-34
HS60-MVUNR-3	9IHT71260M49	VN_-33	2.362	1.570	1.375	2.500	IVSN-322	NL-34L	CL-30	XNS-510	S-34	S-34
HS50-MVUNR-4	9IHT71250M56	VN_-43	1.969	1.570	1.750	3.250	IVSN-433	NL-46	CL-12	XNS-510	S-46	S-46
HS60-MVUNR-4	9IHT71260M56	VN_-43	2.362	1.570	1.375	2.500	IVSN-433	NL-46	CL-12	XNS-510	S-46	S-46

\*Left hand quoted on request.

## H-MWLNL/R\*

5° Head for 80° Trigon

Most heads available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

### PARTS

Description	EDP Code	Insert	D	C	F	Min. Bore	Lock		Clamp		Seat	
							Seat	Pin	Clamp	Screw	Screw	Screw
H16-MWLNR-3	9IHT7301649	WN_-33	1.000	1.625	0.640	1.200	IWSN-322	NL-33L	CL-6	XNS-36	N/A	N/A
H20-MWLNR-3	9IHT7302049	WN_-33	1.250	1.625	0.765	1.470	IWSN-322	NL-34L	CL-6	XNS-36	N/A	N/A
H24-MWLNR-3	9IHT7302449	WN_-33	1.500	1.625	0.890	1.760	IWSN-322	NL-34L	CL-6	XNS-36	N/A	N/A
H32-MWLNR-3	9IHT7303249	WN_-33	2.000	1.625	1.281	2.400	IWSN-322	NL-34L	CL-6	XNS-36	N/A	N/A
H20-MWLNR-4	9IHT7302056	WN_-43	1.250	1.625	0.765	1.470	IWSN-433	NL-46	CL-20	XNS-47	N/A	N/A
H24-MWLNR-4	9IHT7302456	WN_-43	1.500	1.625	0.890	1.760	IWSN-433	NL-46	CL-20	XNS-47	N/A	N/A
H28-MWLNR-4	9IHT7302856	WN_-43	1.750	1.625	1.015	2.010	IWSN-433	NL-46	CL-20	XNS-47	N/A	N/A
H32-MWLNR-4	9IHT7303256	WN_-43	2.000	1.625	1.281	2.400	IWSN-433	NL-46	CL-20	XNS-47	N/A	N/A

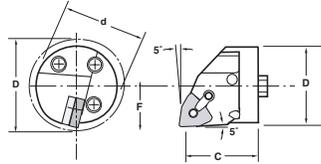
\*Left hand quoted on request.

# TURNING



## HS-MWLNL/R\*

5° Head for 80° Trigon (570 Type)



RH SHOWN

Most heads available with coolant port  
(ie: Add CP to end of description)

### PARTS

Description	EDP Code	Insert	D	C	F	Min. Bore	Lock			Clamp		Seat
							Seat	Pin	Clamp	Screw	Screw	Screw
HS25-MWLNR-3	9IHST73025M49	WN_-33	.984	1.260	0.640	1.200	IWSN-322	NL-33L	CL-6	XNS-36	N/A	
HS32-MWLNR-3	9IHST73032M49	WN_-33	1.259	1.260	0.765	1.470	IWSN-322	NL-34L	CL-6	XNS-36	N/A	
HS40-MWLNR-3	9IHST73040M49	WN_-33	1.575	1.260	0.890	1.760	IWSN-322	NL-34L	CL-6	XNS-36	N/A	
HS50-MWLNR-3	9IHST73050M49	WN_-33	1.969	1.570	1.281	2.400	IWSN-322	NL-34L	CL-6	XNS-36	N/A	
HS32-MWLNR-4	9IHST73032M56	WN_-43	1.259	1.260	0.765	1.470	IWSN-433	NL-46	CL-20	XNS-47	N/A	
HS40-MWLNR-4	9IHST73040M56	WN_-43	1.575	1.260	0.890	1.760	IWSN-433	NL-46	CL-20	XNS-47	N/A	
HS50-MWLNR-4	9IHST73050M56	WN_-43	1.969	1.570	1.281	2.400	IWSN-433	NL-46	CL-20	XNS-47	N/A	

\*Left hand quoted on request.



# TURNING

Material			Chipbreaker	Depth of Cut	Feed Rate
Low Carbon Steels BHN 100-225	<b>STEEL</b>	<b>NEGATIVE</b> ↑ FINISH ↓ ROUGH	FM	.020 - .080	.004 - .008
Carbon Steels BHN 200-300			MM	.040 - .160	.008 - .016
Alloy Steels BHN 225-275			RM	.080 - .200	.012 - .020
Alloy Steels BHN 275-400			HR	.120 - .260	.014 - .024
Alloy Steels BHN Over 400		<b>POSITIVE</b> ↑ FINISH ↓ ROUGH	FM	.020 - .060	.004 - .008
Tool Steels Hot & Cold Worked			MM	.040 - .140	.004 - .010
Martensitic Stainless Steel 400 Series			RM	.040 - .160	.008 - .014
Austenitic Stainless Steel 300 Series	<b>STAINLESS STEEL</b>	<b>NEGATIVE</b> → FINISH ← ROUGH	FM	.040 - .120	.006 - .012
			MM	.040 - .140	.008 - .016
			RM	.060 - .160	.010 - .018
PH Duplex		<b>POSITIVE</b> → FINISH ← ROUGH	FM	.020 - .080	.002 - .006
			MM	.020 - .120	.002 - .008
			RM	.040 - .140	.004 - .010
Gray Iron	<b>CAST IRON</b>	<b>NEGATIVE</b> ↑ FINISH ↓ ROUGH	FM	.040 - .140	.008 - .014
Ductile Iron BHN 140-180			RM	.060 - .160	.010 - .016
Ductile Iron BHN 190-250			FLAT TOP	.040 - .200	.008 - .020
Spheroidal Iron BHN 190-250	<b>NON-FERROUS</b>	<b>NEG</b>	FM	.020 - .100	.004 - .010
Aluminum > 5% Silicon			RM	.060 - .140	.010 - .016
Aluminum < 5% Silicon		<b>POSITIVE</b> ↑ FINISH ↓ ROUGH	FM	.020 - .080	.002 - .006
			MM	.060 - .280	.008 - .022
Copper / Zinc / Brass			RM	.080 - .300	.012 - .022

TURNING

# TURNING



## Cutting Data - Surface feet per minute (meters per minute)

			AGS50		AGS54	
			F	R	F	R
<b>STEEL</b>	Free Machining Carbon Steels	m/min	500	250	250	150
		sfm	1600	640	800	480
	Plain Carbon Steels	m/min	400	200	180	50
		sfm	1280	640	576	160
	Alloy Steels 190-330 HB	m/min	300	140		
		sfm	960	400		
	Alloy Steels 330-450 HB	m/min	180	120		
		sfm	576	384		

			APS35	
			F	R
<b>STAINLESS STEEL</b>	Martensitic 400 Series	m/min	165	80
		sfm	540	260
	300 Series	m/min	165	80
		sfm	540	260

			AS20	
			F	R
<b>CAST IRON</b>	Grey Cast 190-330 HB	m/min	500	250
		sfm	1600	640
	Grey Cast 330-450 HB	m/min	300	140
		sfm	876	448
	Alloy/Ductile	m/min	250	120
		sfm	800	384

			APS35	
			F	R
<b>NON-FERROUS</b>	Free Machining Aluminum	m/min	180	100
		sfm	540	260
	High Silicon Aluminum Alloys	m/min	95	50
		sfm	304	160
	Copper Zinc Brass	m/min	180	100
		sfm	576	330
	Non-Metallics	m/min	180	100
		sfm	576	330

			APS35	
			F	R
<b>HIGH TEMP ALLOYS</b>	High Temp Alloys 200-260 HB	m/min	200	60
		sfm	650	200
	High Temp Alloys 260-450 HB	m/min	65	35
		sfm	215	115
	Titanium Alloys (Ti 6Al-4V)	m/min	180	110
		sfm	525	345

**NOTE:** Decrease Vc if interrupted cut, roughing, unstable conditions and/or uncoated grade