




## *Installation & Removal Tools*

### *Metric*

An aerial photograph of a road with five parallel tracks curving to the right. The tracks are light-colored, possibly gravel or sand, and are set against a dark blue background. The tracks are arranged in a fan shape, with the outermost track curving most sharply to the right.

*Ring Locked Studs and Inserts*  
*Ring Locked Size-On-Size Studs*  
*Thinwall Inserts*  
*Press Nuts & Bolts*  
*Fluid Adaptors*

## Ring Locked Stud and Insert Installation Tools - Metric



MM( )W Series Lockring Wrench



MMT()-()D Series Lockring Drive Tool

MI Part No.	Rosan* Wrench Part No.	MI Part No. LR Drive Tool	Rosan* Part No. LR Drive Tool
MM8W	M8W	MMT0508-10D	RMT0508-10D
MM10W	M10W	MMT0610-12D	RTM0610-12D
MM12W	M12W	MMT0710-14D	RMT0710-14D
MM14W	M14W	MMT0812-14D	RTM0812-14D
MM16W	M16W	MMT1015-16D	RMT1015-16D
MM20W	M20W	MMT1015-16D	RMT1015-16D
MM22W	M22W	MMT1215-20D	RMT1215-20D
MM24W	M24W	MMT1415-22D	RMT1415-22D
MM27W	M27W	MMT1615-24D	RMT1615-24D
MM30W	M30W	MMT1620-24D	RMT1620-24D
MM36W	M36W	MMT1815-27D	RMT1815-27D
MM42W	M42W	MMT2015-30D	RMT2015-30D
		MMT2420-36D	RMT2420-36D
		MMT3020-42D	RMT3020-42D



M14()-() Step Drills



MMK8()-() Series Kits

Step Drill	Rosan* Step Drill Part No.	MI Kits Part No.	Rosan* Kits Part No.
M14-22008-012	14-22008-012	MMKM8-0508	MKM8-0508
M14-22010-014	14-22010-014	MMKM8-0610	MKM8-0610
M14-22012-018	14-22012-018	MMKM8-0710	MKM8-0710
M14-22014-022	14-22014-022	MMKM8-0812	MKM8-0812
M14-22016-026	14-22016-026	MMKM8-0810	MKM8-0810
M14-22020-034	14-22020-034	MMKM8-1015	MKM8-1015
M14-22022-038	14-22022-038	MMKM8-1012	MKM8-1012
		MMKM8-1215	MKM8-1215
		MMKM8-1212	MKM8-1212
		MMKM8-1415	MKM8-1415

## Ring Locked Stud Installation Tools - Metric



MSMT( )D( ) SERIES LOCKRING DRIVE TOOL



M14-11000-( ) SERIES STUD REMOVAL TOOL

LR Drive Tool	Rosan* Lockring Drive Tool Part No.	MI Removal Tool (hollow mill) Part No.	Rosan* Removal Tool (hollow mill) Part No.
MSMT508D5	SMT508D5	M14-11000-005	14-11000-005
MSMT610D6	SMT610D6	M14-11000-006	14-11000-006
MSMT712D7	SMT712D7	M14-11000-007	14-11000-007
MSMT812D8	SMT812D8	M14-11000-008	14-11000-008
MSMT81D8	SMT81D8	M14-11000-010	14-11000-010
MSMT1014D10	SMT1014D10	M14-11000-012	14-11000-012
MSMT1014D10	SMT1014D10	M14-11000-014	14-11000-014
MSMT1216D11	SMT1216D11		
MSMT1420D11	SMT1420D11		
MZA12375-08D	RZA12375-08D		

## Ring Locked Size-on-Size Stud Installation Tools - Metric



MSMEPBTM ( ) SERIES PREBROACH TOOL

MI Step Drill Part No.	Rosan* Step Drill Part No.	MI Lockring Drive Tool Part No.	Rosan* Lockring Drive Tool Part No.
MSME0508D	SME0508D	MSMET0506	SMET0506
	SME0610D	MSMET06D6	SMET06D6
MSME0710D	SME0710D	MSMET07D6	SMET07D6
MSME0812D	SME0812D	MSMET08D6	SMET08D6
MSME0810D	SME0810D	MSMET10D6	SMET10D6
MSME1015D	SME1015D		
MSME1012D	SME1012D		
MI Part No.	Rosan* Part No.		
Prebroach Tool	Prebroach Tool		
MSMEPBTM0508	SMEPBTM0508		
MSMEPBTM0610	SMEPBTM0610		
MSMEPBTM0710	SMEPBTM0710		
MSMEPBTM0812	SMEPBTM0812		
MSMEPBTM1015	SMEPBTM1015		
MSMEPBTM1012	SMEPBTM1012		

## Thinwall Insert Installation Tools - Metric



MRM(J)W2 No-Lock Wrench



MRM(J)W Locking Wrench



MRM(J)S and MRMW(J)S Swage Tools



MRM(J)D and MRMW(J)D Thinwall Insert Step Drills

MI Part No. Wrench for NO Lock Inserts	Rosan* Part No. Wrench for NO Lock Inserts	MI Part No. Wrench for Lock Inserts	Rosan* Part No. Wrench for Internal Lock Inserts	MI Part No. Swage Tool	Rosan* Part No. Swage Tool
MRM0305W2	SRM0305W2	MRM0305W	SRM0305W	MRM0305S	SRM0305S
MRM0407W2	SRM0407W2	MRM0407W	SRM0407W	MRM0407S	SRM0407S
MRM0508W2	SRM0508W2	MRM0508W	SRM0508W	MRM0508S	SRM0508S
MRM0610W2	SRM0610W2	MRM0610W	SRM0610W	MRM0610S	SRM0610S
MRM0710W2	SRM0710W2	MRM0710W	SRM0710W	MRM0710S	SRM0710S
MRM0812W2	SRM0812W2	MRM0812W	SRM0812W	MRM0812S	SRM0812S
	SRM1015W2	MRM1015W	SRM1015W	MRM1015S	SRM1015S
MRM1215W2	SRM1215W2	MRM1215W	SRM1215W	MRM1215S	SRM1215S
MRM1415W2	SRM1415W2	MRM1415W	SRM1415W	MRM1415S	SRM1415S

Thinwall Step Drills	Thinwall Step Drills	Thinwall Oversize Step Drills	Thinwall Oversize Step Drills	Oversize Swage Tool	Oversize Swage Tool
MRM0305D	SRM0305D	MRMW0305D	SRMW0305D	MRMW0305S	SRMW0305S
MRM0407D	SRM0407D	MRMW0407D	SRMW0407D	MRMW0407S	SRMW0407S
MRM0508D	SRM0508D	MRMW0508D	SRMW0508D	MRMW0508S	SRMW0508S
MRM0610D	SRM0610D	MRMW0610D	SRMW0610D	MRMW0610S	SRMW0610S
MRM0710D	SRM0710D	MRMW0710D	SRMW0710D	MRMW0710S	SRMW0710S
MRM0812D	SRM0812D	MRMW0812D	SRMW0812D	MRMW0812S	SRMW0812S
MRM1015D	SRM1015D	MRMW1015D	SRMW1015D	MRMW1015S	SRMW1015S
MRM1215D	SRM1215D	MRMW1215D	SRMW1215D	MRMW1215S	SRMW1215S
MRM1415D	SRM1415D	MRMW1415D	SRMW1415D	MRMW1415S	SRMW1415S

## Thinwall Insert Gages - Metric



MRM(J)GSD and MRMW(J)GSD Thinwall Gages

MI Part No. Gage	Rosan* Part No. Gage	MI Part No. Gage-Oversize	Rosan* Part No. Gage -Oversize
MRMGSD0305	SRMGSD0305	MRMWGSD0305	SRMWGSD0305
MRMGSD0407	SRMGSD0407	MRMWGSD0407	SRMWGSD0407
MRMGSD0508	SRMGSD0508	MRMWGSD0508	SRMWGSD0508
MRMGSD0610	SRMGSD0610	MRMWGSD0610	SRMWGSD0610
MRMGSD0710	SRMGSD0710	MRMWGSD0710	SRMWGSD0710
MRMGSD0812	SRMGSD0812	MRMWGSD0812	SRMWGSD0812
MRMGSD1015	SRMGSD1015	MRMWGSD1015	SRMWGSD1015
MRMGSD1215	SRMGSD1215	MRMWGSD1215	SRMWGSD1215
MRMGSD1415	SRMGSD1415	MRMWGSD1415	SRMWGSD1415

## Thinwall Insert Removal Drills – Metric



MRM( )R and MRMW( )R  
Thinwall Removal Tools

MI Part No. Removal Tool	Rosan* Part No. Removal Tool	MI Part No. Removal Tool- Oversize	Rosan* Part No. Removal Tool- Oversize
<b>MRM0305R</b>	<a href="#">SRM0305R</a>	<b>MRMW0305R</b>	<a href="#">SRMW0305R</a>
<b>MRM0407R</b>	<a href="#">SRM0407R</a>	<b>MRMW0407R</b>	<a href="#">SRMW0407R</a>
<b>MRM0508R</b>	<a href="#">SRM0508R</a>	<b>MRMW0508R</b>	<a href="#">SRMW0508R</a>
<b>MRM0610R</b>	<a href="#">SRM0610R</a>	<b>MRMW0610R</b>	<a href="#">SRMW0610R</a>
<b>MRM0710R</b>	<a href="#">SRM0710R</a>	<b>MRMW0710R</b>	<a href="#">SRMW0710R</a>
<b>MRM0812R</b>	<a href="#">SRM0812R</a>	<b>MRMW0812R</b>	<a href="#">SRMW0812R</a>
<b>MRM1015R</b>	<a href="#">SRM1015R</a>	<b>MRMW1015R</b>	<a href="#">SRMW1015R</a>
<b>MRM1215R</b>	<a href="#">SRM1215R</a>	<b>MRMW1215R</b>	<a href="#">SRMW1215R</a>
<b>MRM1415R</b>	<a href="#">SRM1415R</a>	<b>MRMW1415R</b>	<a href="#">SRMW1415R</a>

## Press Nut & Bolt Tooling – Metric



MMPN( )DS Drive Tool



MPBM( )DS Press Bolt Drive Tool



MPBM( ) FD Press Bolt Drive Tool

### Press Nut Tooling

MI Part No. Drive Tool	Rosan* Part No. Drive Tool	MI Part No. Drive Tool	Rosan* Part No. Drive Tool
<b>MMRPNM2.5DS</b>	<a href="#">MRPNM2.5DS</a>	<b>MMFPNM2.5DS</b>	<a href="#">MFPNM2.5DS</a>
<b>MMRPNM3DS</b>	<a href="#">MRPNM3DS</a>	<b>MMFPNM3DS</b>	<a href="#">MFPNM3DS</a>
<b>MMRPNM3.5DS</b>	<a href="#">MRPNM3.5DS</a>	<b>MMFPNM3.5DS</b>	<a href="#">MFPNM3.5DS</a>
<b>MMRPNM4DS</b>	<a href="#">MRPNM4DS</a>	<b>MMFPNM4DS</b>	<a href="#">MFPNM4DS</a>
<b>MMRPNM5DS</b>	<a href="#">MRPNM5DS</a>	<b>MMFPNM5DS</b>	<a href="#">MFPNM5DS</a>
<b>MMRPNM6DS</b>	<a href="#">MRPNM6DS</a>	<b>MMFPNM6DS</b>	<a href="#">MFPNM6DS</a>

### Press Bolt Tooling

MI Part No. Drive Tool-	Rosan* Part Drive Tool-	MI Part No. Drive Tool-	Rosan* Part Drive Tool-	MI Part No. Drive Tool	Rosan* Part Drive Tool
<b>MPBM03DS</b>	<a href="#">PBM03DS</a>	<b>MPBM03FD</b>	<a href="#">PBM03FD</a>		
<b>MPBM04DS</b>	<a href="#">PBM04DS</a>	<b>MPBM04FD</b>	<a href="#">PBM04FD</a>		
<b>MPBM05DS</b>	<a href="#">PBM05DS</a>	<b>MPBM05FD</b>	<a href="#">PBM05FD</a>		
<b>MPBM06DS</b>	<a href="#">PBM06DS</a>	<b>MPBM06FD</b>	<a href="#">PBM06FD</a>		

## *Fluid Adapter Installation Tooling - Metric*



MFMOPB( )HDB Broach Tool



MFMOPB( ) Broach Tool-Impact



MFM( ) CR Port Chip removal

### Fluid Adaptor Port Tooling

MI Part No. Broach Tool	Rosan* Part No. Broach Tool	MI Part No. Broach Tool-Impact	Rosan* Part No. Broach Tool-Impact
MFMOPB077HDB	RFMOPB077HDB	MFMOPB077	RFMOPB077
MFOMPB098HDB	RFOMPB098HDB	MFOMPB098	RFOMPB098
MFOMPB125HDB	RFOMPB125HDB	MFOMPB125	RFOMPB125
MFOMPB136HDB	RFOMPB136HDB	MFOMPB136	RFOMPB136
MFOMPB153HDB	RFOMPB153HDB	MFOMPB153	RFOMPB153
MFOMPB170HDB	RFOMPB170HDB	MFOMPB170	RFOMPB170
	RFOMPB192HDB	MFOMPB192	RFOMPB192
MFOMPB215HDB	RFOMPB215HDB	MFOMPB215	RFOMPB215
MFMOPB231HDB	RFMOPB231HDB	MFMOPB231	RFMOPB231
MFOMPB253HDB	RFOMPB253HDB	MFOMPB253	RFOMPB253
MFOMPB295HDB	RFOMPB295HDB	MFOMPB295	RFOMPB295
MFOMPB320HDB	RFOMPB320HDB	MFOMPB320	RFOMPB320
MFOMPB350HDB	RFOMPB350HDB	MFOMPB350	RFOMPB350

MI Part No. Chip Removal Tool	Rosan* Part No. Chip Removal Tool	MI Part No. Porting Tool	Rosan* Part No. Porting Tool
MFM077CR	RFM077CR	MPTM077	RPTM077
MFM098CR	RFM098CR	MPTM098	RPTM098
MFM125CR	RFM125CR	MPTM125	RPTM125
MFM136CR	RFM136CR	MPTM136	RPTM136
MFM153CR	RFM153CR	MPTM153	RPTM153
MFM170CR	RFM170CR	MPTM170	RPTM170
MFM192CR	RFM192CR	MPTM192	RPTM192
MFM214CR	RFM214CR	MPTM214	RPTM214
MFM231CR	RFM231CR	MPTM231	RPTM231
MFM253CR	RFM253CR	MPTM253	RPTM253
MFM295CR	RFM295CR	MPTM295	RPTM295
MFM320CR	RFM320CR	MPTM320	RPTM320
MFM350CR	RFM350CR	MPTM350	RPTM350

## *Fluid Adapter Installation Tooling - Metric*



MFM(-)( )W Wrench



MFM(-)( )D Lockring Drive Tool



MFM(-)( )DW Combination Wrench and Drive Tool

MI Part No. Wrench	Rosan* Part No. Wrench	MI Part No. Lockring Drive Tool	Rosan* Part No. Lockring Drive Tool
MFM6828-077W	RFM6828-077W	MFM6828-077D	RFM6828-077D
MFM6828-098W	RFM6828-098W	MFM6828-098D	RFM6828-098D
MFM6828-125W	RFM6828-125W	MFM6828-125D	RFM6828-125D
MFM6828-136W	RFM6828-136W	MFM6828-136D	RFM6828-136D
MFM6828-153W	RFM6828-153W	MFM6828-153D	RFM6828-153D
MFM6828-170W	RFM6828-170W	MFM6828-170D	RFM6828-170D
MFM6828-192W	RFM6828-192W	MFM6828-192D	RFM6828-192D
MFM6828-214W	RFM6828-214W	MFM6828-214D	RFM6828-214D
MFM6828-231W	RFM6828-231W	MFM6828-231D	RFM6828-231D
MFM6828-253W	RFM6828-253W	MFM6828-253D	RFM6828-253D
MFM6828-295W	RFM6828-295W	MFM6828-295D	RFM6828-295D
MFM6828-320W	RFM6828-320W	MFM6828-320D	RFM6828-320D
MFM6828-359W	RFM6828-359W	MFM6828-359D	RFM6828-359D

MI Part No. Combination Wrench and Drive Tool	Rosan* Part No. Combination Wrench and Drive Tool
MFM077-1010DW	RFM077-1010DW
MFM098-1212DW	RFM098-1212DW
MFM125-1415DW	RFM125-1415DW
MFM136-1615DW	RFM136-1615DW
MFM153-1815DW	RFM153-1815DW
MFM170-2015DW	RFM170-2015DW
MFM192-2215DW	RFM192-2215DW
MFM214-2415DW	RFM214-2415DW
MFM231-2715DW	RFM231-2715DW
MFM253-3015DW	RFM253-3015DW
MFM295-3315DW	RFM295-3315DW
MFM320-3615DW	RFM320-3615DW
MFM350-3915DW	RFM350-3915DW

## *Fluid Adapter Installation Tooling - Metric*



MFM( )LPDE Lockring Removal Tool



MORTM( ) O-Ring Installation Tool

MI Part No.	Rosan* Part No.
Lockring Removal	Lockring Removal Tool
MFM077LPDE	<a href="#">RFM077LPDE</a>
MFM098LPDE	<a href="#">RFM098LPDE</a>
MFM125LPDE	<a href="#">RFM125LPDE</a>
MFM136LPDE	<a href="#">RFM136LPDE</a>
MFM153LPDE	<a href="#">RFM153LPDE</a>
MFM170LPDE	<a href="#">RFM170LPDE</a>
MFM214LPDE	<a href="#">RFM214LPDE</a>
MFM214LPDE	<a href="#">RFM214LPDE</a>
MFM231LPDE	<a href="#">RFM231LPDE</a>
MFM253LPDE	<a href="#">RFM253LPDE</a>
MFM295LPDE	<a href="#">RFM295LPDE</a>
MFM320LPDE	<a href="#">RFM320LPDE</a>
MFM350LPDE	<a href="#">RFM350LPDE</a>

MI Part No.	Rosan* Part No.
O-Ring Installation	O-Ring Installation
MORTM0610	<a href="#">ORTM0610</a>
MORTM0810	<a href="#">ORTM0810</a>
MORTM1010	<a href="#">ORTM1010</a>
MORTM1212	<a href="#">ORTM1212</a>
MORTM1415	<a href="#">ORTM1415</a>
MORTM1615	<a href="#">ORTM1615</a>
MORTM1815	<a href="#">ORTM1815</a>
MORTM2105	<a href="#">ORTM2105</a>
MORTM2215	<a href="#">ORTM2215</a>
MORTM2415	<a href="#">ORTM2415</a>
MORTM2715	<a href="#">ORTM2715</a>
MORTM3015	<a href="#">ORTM3015</a>
MORTM3315	<a href="#">ORTM3315</a>