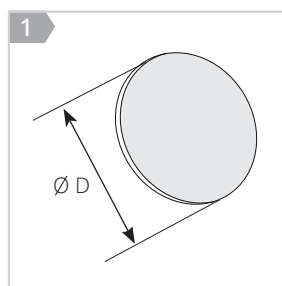
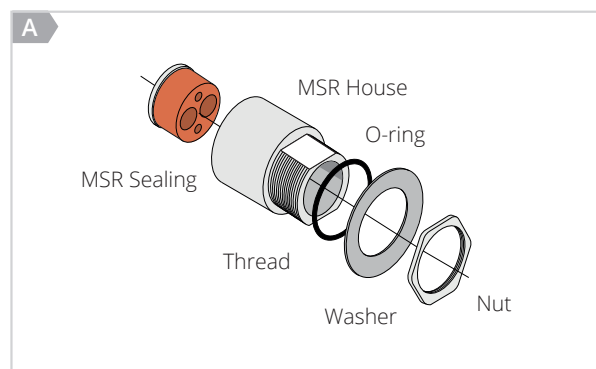


Work Installation instruction.

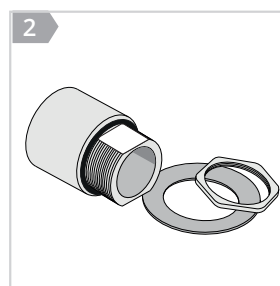
MSR – 20-63
MSR INS-2025-Rev. A

Tools and Materials Required:

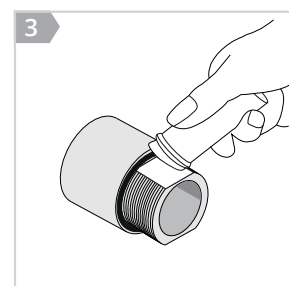
- Spanner
- MCT Brattberg Lubricant
- Stanley Knife or Razorblade
- Measuring Tape
- Cleaning Cloth



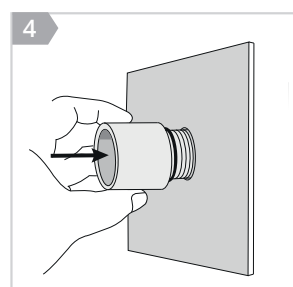
Ensure the hole aperture matches the MSR hole size requirement.



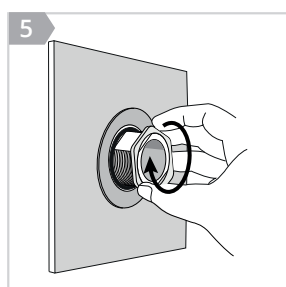
Loosen and remove the nut and washer from the MSR assembly.



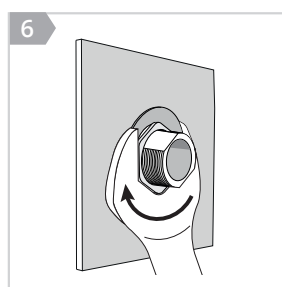
Apply MCT Brattberg Lubricant to the O-ring to facilitate installation.



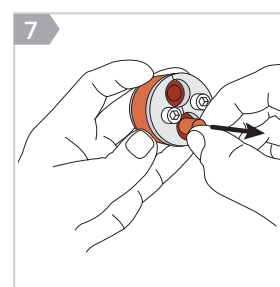
Insert the MSR housing into the prepared hole.



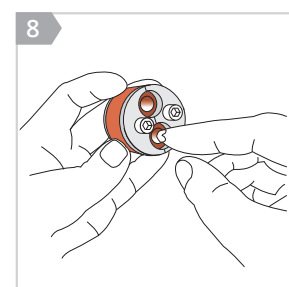
Position the washer and nut on the thread.



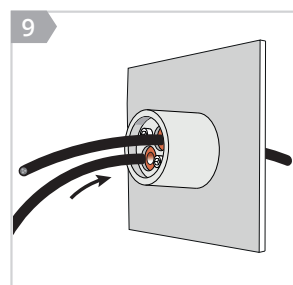
Tighten the nut firmly until the O-ring is compressed and the house is fixed to the structure.



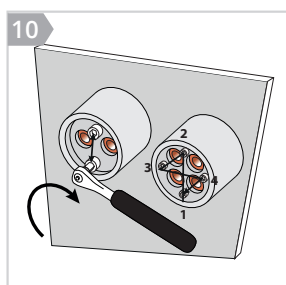
Modify the MSR sealing by removing the core and any excess rings as needed, allowing the cable or pipe to pass through.



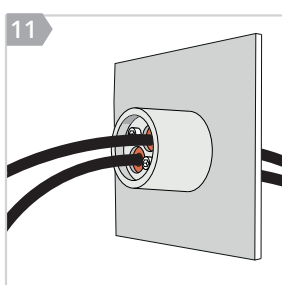
Lubricate the inner sealing surfaces and the cable or pipe using MCT Brattberg Lubricant.



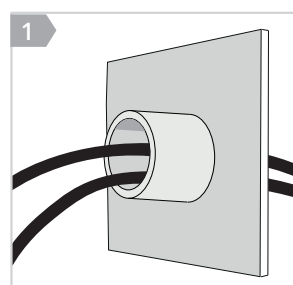
Install the sealing into the MSR housing and guide the cable or pipe through it.



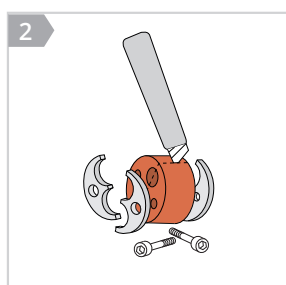
Gradually tighten the screws in a crosswise pattern until the cable or pipe is securely fixed and the rubber seal protrudes slightly.



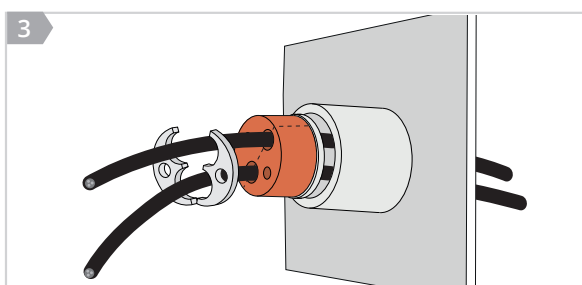
Retrofit installation



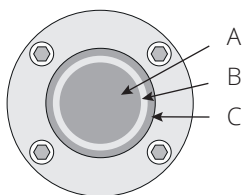
If the cable or pipe is already installed, open the MSR sealing and place it over the service.



Open the MSR sealing and place it over the service. Use pliers if necessary to separate the hardware. Cut the seal with Stanley-knife or razorblade.



Note: Verifying the installation of the seal with a torque value is not recommended. The value change depending on the ambient temperature and amount/type of service through the sealing. If verification is required, please see maximum value for each type of fixing below.



MSR required hole size diameter.	
MSR 20 T1	Ø21 +1mm
MSR 40 T1	Ø41 +1mm
MSR 40 T2	Ø41 +1mm
MSR 40 T3	Ø41 +1mm
MSR 50 T1	Ø51 +1mm
MSR 50 T2	Ø51 +1mm
MSR 50 T3	Ø51 +1mm
MSR 63 T1	Ø64 +1mm
MSR 63 T2	Ø64 +1mm
MSR 63 T3	Ø64 +1mm

MSR SIZE	CABLE ENTRIES	Plug Range		Ring Range		Fixings		Max Torque
		A		B		C		
		Min	Max	Min	Max	Min	Max	Nm
20 T1	1	4	6	6	12	-	-	M4 3.2
40 T1	1	11	18	18	24	-	-	M4 3.2
40 T2	2	6	9	9	15	-	-	M6 11.2
40 T3	4	6	12	-	-	-	-	M4 3.2
50 T1	5	5	10	-	-	-	-	M6 11.2
50 T2	3	4	10	10	16	-	-	M6 11.2
50 T3	1	20	26	26	32	-	-	M5 6.6
63 T1	4	4	10	10	16	-	-	M6 11.2
63 T2	8	5	10	-	-	-	-	M5 6.6
63 T3	1	22	32	-	-	-	-	M5 6.6

Disclaimer MSR

- For optimum reliability, wait 48 hours or longer after installation before exposing the cables/pipes to strain or pressure.
- Cables/pipes should be parallel to the sleeve/aperture.
- Cable/pipe with a considerable weight needs to be supported to prevent damage or subsidence to the seal.
- Approvals or certificates may include amendments or limitations related to this application.
- A seal with core is spare capacity.
- Latest information can be found on MCTBrattberg.com

Disclaimer:

This instruction guide may be subject to revision and changes due to development and changes of the material and products. The data is derived from tests and experience. If not stated as minimum values, the data is average data and should be treated as such. Calculations should be verified by actual tests. The data is furnished without liability for the company and does not constitute a warranty or representation in respect of the material or its use. The company reserves the right to release new instruction guides in replacement.