

The newly developed high-pressure solution from UTILIS (up to a maximum of 200 bar or 2900 psi) ensures optimal delivery of coolant to the insert.

The highly compact and robust design and the stainless steel finish are the main features of this product.

The product range includes several straight and pivoting unions with connection diameters of 4 mm and several quick connections. The use thereof dispenses with the laborious task of unscrewing the high-pressure tubes. This increases efficiency by minimising machine downtime.

The high-pressure hoses are available in a wide variety of lengths with different connections.

Reduction unions, extensions, screw connections, spare parts and coolant distributors round off the product range.

Benefits:

- Flexible enough to be used with all multidec® product lines with internal cooling
- Can be used within a temperature range of –60 to +250 °C or –76 to +482 °F
- Can be used up to a maximum operating pressure of 200 bar or 2900 psi



The range associated with the low-pressure solution for operating pressures up to a maximum of 30 bar or 435 psi includes a straight union and a swivel-type union with a connecting diameter of 4 mm when a polyurethane tube is being used.

As with our high-pressure solution, we offer reduction unions, extensions, closing plugs, and sealing rings. The polyurethane tube with an external diameter of 4 mm is 1000 mm long. This allows you to cut it to the length you need on a case-by-case basis.

A well-balanced range of compact coolant distributors made of light metal completes the offer.

Benefits:

- Flexible enough to be used with all multidec® product lines with internal cooling
- Can be used up to a maximum operating pressure of 30 bar or 435 psi (test pressure of 30 bar or 435 psi)
- Corrosion-resistant and compact design



Overview – Coolant system

Connecting options		620
Coolant distributors – high/low pressure		623
Tubes – high pressure		624
Quick change connectors – high pressure		626
Unions – high pressure		630
Coolant tubes – low pressure		632
Unions – low pressure		633
Screw connections – high/low pressure		634
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Closing plug – high pressure		637
Closing plug – low pressure		638
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High pressure



MLU KV ...

□ 623



MLU... IC ...

□ 608...



... IC

□ 81...

MSP UCF ...



□ 626

MSP UHPT ...



□ 624/625

M5

NM

MSP EVRA ...



□ 634

MSP UICF ...



□ 626

MSP UHPT ...



□ 624/625

M5

M5

NM

MSP UGVR ...



□ 630

MSP UHPT ...



□ 628/629

M5

4

MSP UNM ...



□ 627

MSP UICF ...



□ 626

MSP UHPT ...



□ 625/629/631

M5

NM

M5

MSP UCF ...



□ 626

MSP UNM ...



□ 627

MSP EVRI ...



□ 634

MSP UHPT ...



□ 625/629/631

M5

NM

M5

M5

Low pressure

MSP STVR ...



□ 633

MSP KSK...

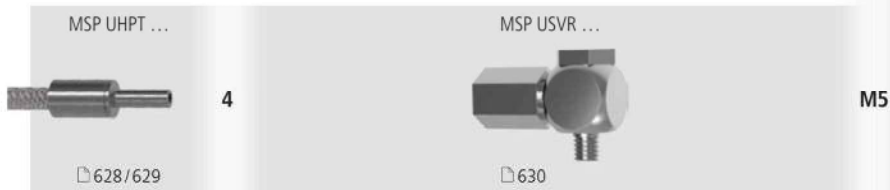


□ 632

M5

4KS

High pressure

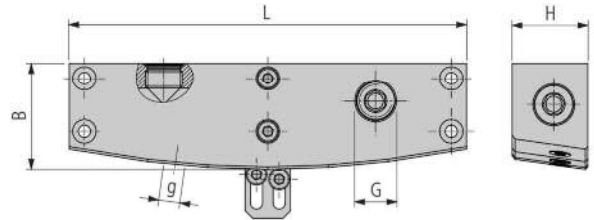


Low pressure



Lined area for notes, consisting of numerous horizontal lines.

maximum 200 bar/2900 psi



MLU KV ... L (Large)

Order designation		Inputs G	Outputs g	Dimensions			Connecting options		□ 620/621
				B	L	H	M5	G½**	
MLU KV 2-3 L	■	3 × G½	2 × M5	25	35	20	Miscellaneous	MSP ... G1/8	
MLU KV 4-3 L	■	3 × G½	4 × M5	27	68	20			
MLU KV 6-3 L	■	3 × G½	6 × M5	28	105	20			
MLU KV 8-3 L	■	3 × G½	8 × M5	28	138	20			

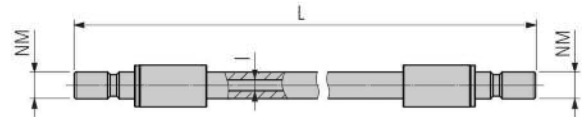
MLU KV ... S* (Small)

Order designation		Inputs G	Outputs g	Dimensions			Connecting options		□ 620/621
				B	L	H	M5	G½**	
MLU KV 2-3 S	■	3 × G½	2 × M5	25	23	20	Miscellaneous	MSP ... G1/8	
MLU KV 4-3 S	■	3 × G½	4 × M5	27	45	20			
MLU KV 6-3 S	■	3 × G½	6 × M5	28	65	20			
MLU KV 8-3 S	■	3 × G½	8 × M5	28	85	20			

* Quick couplings can only be used to a limited extent (less space in this version)

** Screw plugs □ 637
Replacement parts □ 639

maximum 200 bar/2900 psi



MSP UHPT ... NM-NM (Plug – Plug)

Order designation	Dimensions					Connecting options
	L	I				NM
MSP UHPT 100 NM-NM	100	3				MSP UICF ... MSP UCF ... MSP UACF ...
MSP UHPT 150 NM-NM	150	3				
MSP UHPT 200 NM-NM	200	3				
MSP UHPT 250 NM-NM	250	3				
MSP UHPT 300 NM-NM	300	3				
MSP UHPT 400 NM-NM	400	3				
MSP UHPT 500 NM-NM	500	3				

No sealing ring required

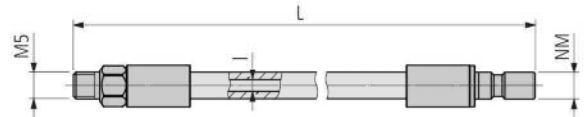
MSP UHPTB* ... NM-NM (Plug – Plug)

Order designation	Dimensions					Connecting options
	L	I				NM
MSP UHPTB 100 NM-NM	100	3.7				MSP UICF ... MSP UCF ... MSP UACF ...
MSP UHPTB 150 NM-NM	150	3.7				
MSP UHPTB 200 NM-NM	200	3.7				
MSP UHPTB 250 NM-NM	250	3.7				
MSP UHPTB 300 NM-NM	300	3.7				
MSP UHPTB 400 NM-NM	400	3.7				
MSP UHPTB 500 NM-NM	500	3.7				

No sealing ring required

* B (bigger): for 50 % more coolant passage

maximum 200 bar/2900 psi



MSP UHPT ... M5-NM (External thread–Pug)

Order designation		Dimensions				Connecting options	
		L	I			M5	NM
MSP UHPT 100 M5-NM	■	100	3			Miscellaneous	MSP UICF ... MSP UCF ... MSP UACF ...
MSP UHPT 150 M5-NM	■	150	3				
MSP UHPT 200 M5-NM	■	200	3				
MSP UHPT 250 M5-NM	■	250	3				
MSP UHPT 300 M5-NM	■	300	3				
MSP UHPT 400 M5-NM	■	400	3				
MSP UHPT 500 M5-NM	■	500	3				

No sealing ring required

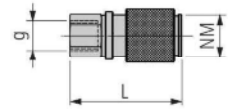
MSP UHPTB* ... M5-NM (External thread–Pug)

Order designation		Dimensions				Connecting options	
		L	I			M5	NM
MSP UHPTB 100 M5-NM	■	100	3.7			Miscellaneous	MSP UICF ... MSP UCF ... MSP UACF ...
MSP UHPTB 150 M5-NM	■	150	3.7				
MSP UHPTB 200 M5-NM	■	200	3.7				
MSP UHPTB 250 M5-NM	■	250	3.7				
MSP UHPTB 300 M5-NM	■	300	3.7				
MSP UHPTB 400 M5-NM	■	400	3.7				
MSP UHPTB 500 M5-NM	■	500	3.7				

No sealing ring required

* B (bigger): for 50 % more coolant passage

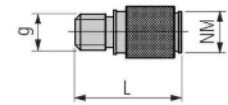
maximum 200 bar/2900 psi



MSP UICF ... (Internal thread-Coupling)

Order designation		Dimensions				Connecting options	
		g	L			g	NM
MSP UICF M5	■	M5	18			Miscellaneous	MSP ...UNM MSP ...USNM MSP ...UANM

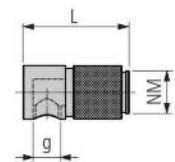
No sealing ring required



MSP UCF ... (External thread-Coupling)

Order designation		Dimensions				Connecting options	
		g	L			g	NM
MSP UCF M5	■	M5	21			Miscellaneous	MSP ...UNM MSP ...USNM MSP ...UANM
MSP UCF M6	■	M6	21				
MSP UCF M8	■	M8	19				
MSP UCF M8x1	■	M8 x 1	19				
MSP UCF G1/8	■	G ¹ / ₈	19				
MSP UCF PT1/8	■	PT ¹ / ₈	20				

No sealing ring required



MSP UACF ... (Internal thread 90°-Coupling)

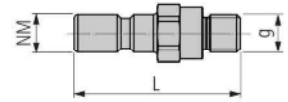
Order designation		Dimensions				Connecting options	
		g	L			g	NM
MSP UACF M5	■	M5	20			Miscellaneous	MSP ...UNM MSP ...USNM MSP ...UANM

No sealing ring required

Closing plug 637
Replacement parts 639

Legend 8...

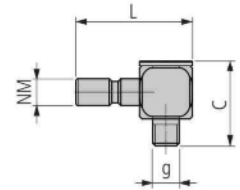
maximum 200 bar/2900 psi



MSP UNM ... (Plug–External thread)

Order designation	Dimensions				Connecting options	
	g	L			g	NM
MSP UNM M5	■	M5	19.5			
MSP UNM M6	■	M6	19.5			
MSP UNM M8	■	M8	21.5			
MSP UNM M8x1	■	M8 × 1	19.5		Miscellaneous	MSP ...UICF ... MSP ...UCF ... MSP ...UACF ...
MSP UNM G1/8	■	G $\frac{1}{8}$	22			
MSP UNM PT1/8	■	PT $\frac{1}{8}$	20			
MSP UNM UNF5/16	■	UNF5/16	19.5			

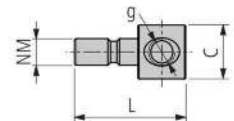
No sealing ring required



MSP USNM ... (90° plug–External thread, swivelling)

Order designation	Dimensions				Connecting options	
	g	C	L		g	NM
MSP USNM M5	■	M5	16	22		
MSP USNM M6	■	M6	17	22		
MSP USNM M8	■	M8	17.5	24		
MSP USNM M8x1	■	M8 × 1	17.5	24	Miscellaneous	MSP ...UICF ... MSP ...UCF ... MSP ...UACF ...
MSP USNM G1/8	■	G $\frac{1}{8}$	20	28		

No sealing ring required



MSP UANM ... (Plug, internal thread 90°)

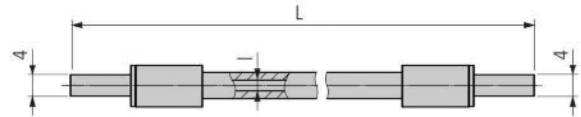
Order designation	Dimensions				Connecting options	
	g	C	L		g	NM
MSP UANM M5	■	M5	10	21	Miscellaneous	MSP ...UICF ... MSP ...UCF ... MSP ...UACF ...

No sealing ring required

Replacement parts _____ □ 639

Legend _____ □ 8...

maximum 200 bar/2900 psi



MSP UHPT ... 4-4 (Nozzle–Nozzle)

Order designation	Dimensions					Connecting options
	L	l				□ 620/621
MSP UHPT 100 4-4	■ 100	3				4 MSP UGVR ... MSP USVR ...
MSP UHPT 150 4-4	■ 150	3				
MSP UHPT 200 4-4	■ 200	3				
MSP UHPT 250 4-4	■ 250	3				
MSP UHPT 300 4-4	■ 300	3				
MSP UHPT 400 4-4	■ 400	3				
MSP UHPT 500 4-4	■ 500	3				

No sealing ring required

MSP UHPTB* ... 4-4 (Nozzle–Nozzle)

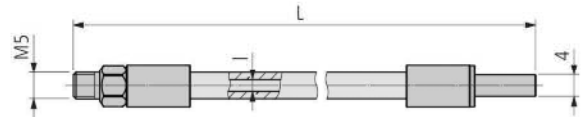
Order designation	Dimensions					Connecting options
	L	l				□ 620/621
MSP UHPTB 100 4-4	■ 100	3.7				4 MSP UGVR ... MSP USVR ...
MSP UHPTB 150 4-4	■ 150	3.7				
MSP UHPTB 200 4-4	■ 200	3.7				
MSP UHPTB 250 4-4	■ 250	3.7				
MSP UHPTB 300 4-4	■ 300	3.7				
MSP UHPTB 400 4-4	■ 400	3.7				
MSP UHPTB 500 4-4	■ 500	3.7				

No sealing ring required

* B (bigger): for 50 % more coolant passage

Nozzle/socket installation □ 640

maximum 200 bar/2900 psi



MSP UHPT ... M5-4 (External thread – Nozzle)

Order designation	Dimensions					Connecting options	
	L	I				M5	4
MSP UHPT 100 M5-4	100	3				Miscellaneous	MSP UGVR ... MSP USVR ...
MSP UHPT 150 M5-4	150	3					
MSP UHPT 200 M5-4	200	3					
MSP UHPT 250 M5-4	250	3					
MSP UHPT 300 M5-4	300	3					
MSP UHPT 400 M5-4	400	3					
MSP UHPT 500 M5-4	500	3					

No sealing ring required

MSP UHPTB* ... M5-4 (External thread – Nozzle)

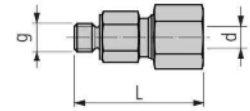
Order designation	Dimensions					Connecting options	
	L	I				M5	4
MSP UHPTB 100 M5-4	100	3.7				Miscellaneous	MSP UGVR ... MSP USVR ...
MSP UHPTB 150 M5-4	150	3.7					
MSP UHPTB 200 M5-4	200	3.7					
MSP UHPTB 250 M5-4	250	3.7					
MSP UHPTB 300 M5-4	300	3.7					
MSP UHPTB 400 M5-4	400	3.7					
MSP UHPTB 500 M5-4	500	3.7					

No sealing ring required

* B (bigger): for 50 % more coolant passage

Nozzle/socket installation 640

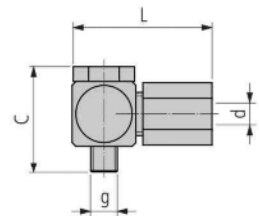
maximum 200 bar/2900 psi



MSP UGVR ... (External thread–External thread)

Order designation		Dimensions				Connecting options	
		g	d	L		g	4
MSP UGVR M5-4	■	M5	4	27			□ 620/621
MSP UGVR G1/8-4	■	G $\frac{1}{8}$	4	32		Miscellaneous	MSP UHPT ...-4
MSP UGVR PT1/8-4	■	PT $\frac{1}{8}$	4	32			

No sealing ring required



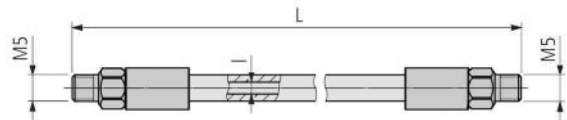
MSP USVR ... (External thread 90°, swivelling–Socket)

Order designation		Dimensions				Connecting options	
		g	d	L	C	g	4
MSP USVR M5-4	■	M5	4	28	21		□ 620/621
MSP USVR G1/8-4	■	G $\frac{1}{8}$	4	37	30	Miscellaneous	MSP UHPT ...-4

No sealing ring required

- Replacement parts □ 639
- Nozzle / socket installation □ 640

maximum 200 bar/2900 psi



MSP UHPT ... M5-M5 (External thread – External thread)

Order designation	Dimensions					Connecting options
	L	I				M5
MSP UHPT 100 M5-M5	■	100	3.7			Miscellaneous
MSP UHPT 150 M5-M5	■	150	3.7			
MSP UHPT 200 M5-M5	■	200	3.7			
MSP UHPT 250 M5-M5	■	250	3.7			
MSP UHPT 300 M5-M5	■	300	3.7			
MSP UHPT 400 M5-M5	■	400	3.7			
MSP UHPT 500 M5-M5	■	500	3.7			

No sealing ring required

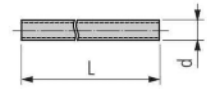
MSP UHPTB* ... M5-M5 (External thread – External thread)

Order designation	Dimensions					Connecting options
	L	I				M5
MSP UHPTB 100 M5-M5	■	100	3.7			Miscellaneous
MSP UHPTB 150 M5-M5	■	150	3.7			
MSP UHPTB 200 M5-M5	■	200	3.7			
MSP UHPTB 250 M5-M5	■	250	3.7			
MSP UHPTB 300 M5-M5	■	300	3.7			
MSP UHPTB 400 M5-M5	■	400	3.7			
MSP UHPTB 500 M5-M5	■	500	3.7			

No sealing ring required

* B (bigger): for 50% more coolant passage

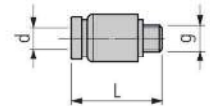
maximum 30 bar/435 psi



MSP KSK... (4KS – 4KS)

Order designation		Dimensions				Connecting options
		d	L			4KS
MSP KSK-4KS	■	4	1000			MSP STVR ... MSP EWR ...

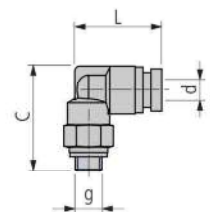
maximum 30 bar/435 psi



MSP STVR ... (KS4–External thread)

Order designation	Dimensions					Connecting options	
	d	g	L			KS4	M5
MSP STVR KS4-M5	4	M5	17			MSP KSK...	Miscellaneous

Including sealing ring



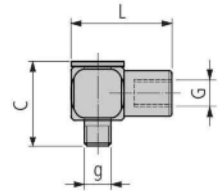
MSP EWR ... (External thread 90° – KS4)

Order designation	Dimensions					Connecting options	
	g	d	L	C		M5	KS4
MSP EWR M5-KS4	M5	4	18	21		Miscellaneous	MSP KSK...

Including sealing ring

- Closing plug MSP VSK ... ▢ 638
- Replacement parts ▢ 639
- STVR/EWR installation ▢ 641

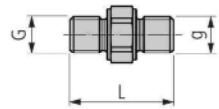
maximum 200 bar/2900 psi



MSP RVRW ... (External thread 90°, swivelling – Internal thread)

Order designation	Dimensions				
	g	G	L	C	
MSP RVRW M5-M5	M5	M5	19	16	

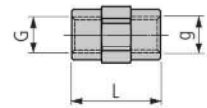
No sealing ring required



MSP EVRA ... (External thread – External thread)

Order designation	Dimensions			
	G	g	L	
MSP EVRA M5-M5	M5	M5	14	

No sealing ring required

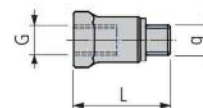


MSP EVRI ... (Internal thread – Internal thread)

Order designation	Dimensions			
	G	g	L	
MSP EVRI M5-M5	M5	M5	14	

No sealing ring required

maximum 200 bar/2900 psi



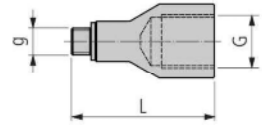
MSP VLR ... (Internal thread–External thread)

Order designation		Dimensions				
		G	g	L		
MSP VLR 100 M5-M5	■	M5	M5	10		
MSP VLR 200 M5-M5	■	M5	M5	20		
MSP VLR 400 M5-M5	■	M5	M5	40		

Including sealing ring

Replacement parts _____ 639

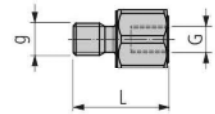
maximum 200 bar/2900 psi



MSP RVRI ... (External thread–Internal thread)

Order designation		Dimensions				
		g	G	L		
MSP RVRI 100 M5-M6	■	M5	M6	15		
MSP RVRI 185 M5-M8x1	■	M5	M8x1	23		
MSP RVRI 225 M5-M10x1	■	M5	M10x1	27		
MSP RVRI 225 M5-G1/8	■	M5	G1/8	27		

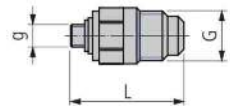
Including sealing ring



MSP RVRA ... (External thread–Internal thread)

Order designation		Dimensions				
		g	G	L		
MSP RVRA 100 M6-M5	■	M6	M5	18		
MSP RVRA 70 M8x1-M5	■	M8x1	M5	15		
MSP RVRA 70 M10x1-M5	■	M10x1	M5	15		
MSP RVRA 70 G 1/8-M5	■	G1/8	M5	15		

No sealing ring required



MSP RVR ... (External thread–External thread)

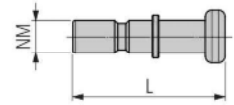
Order designation		Dimensions				
		g	G	L		
MSP RVR M5-7/16-20 UNF	■	M5	7/16-20UNF	29		

Including sealing ring

Replacement parts 639

Legend 8...

maximum 200 bar/2900 psi

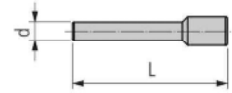


MSP VNM (Plug)

Order designation		Dimensions				NM
		L				
MSP VNM	■	23				MSP ...UICF ... MSP ...UCF ... MSP ...UACF ...

No sealing ring required

maximum 30 bar/435 psi



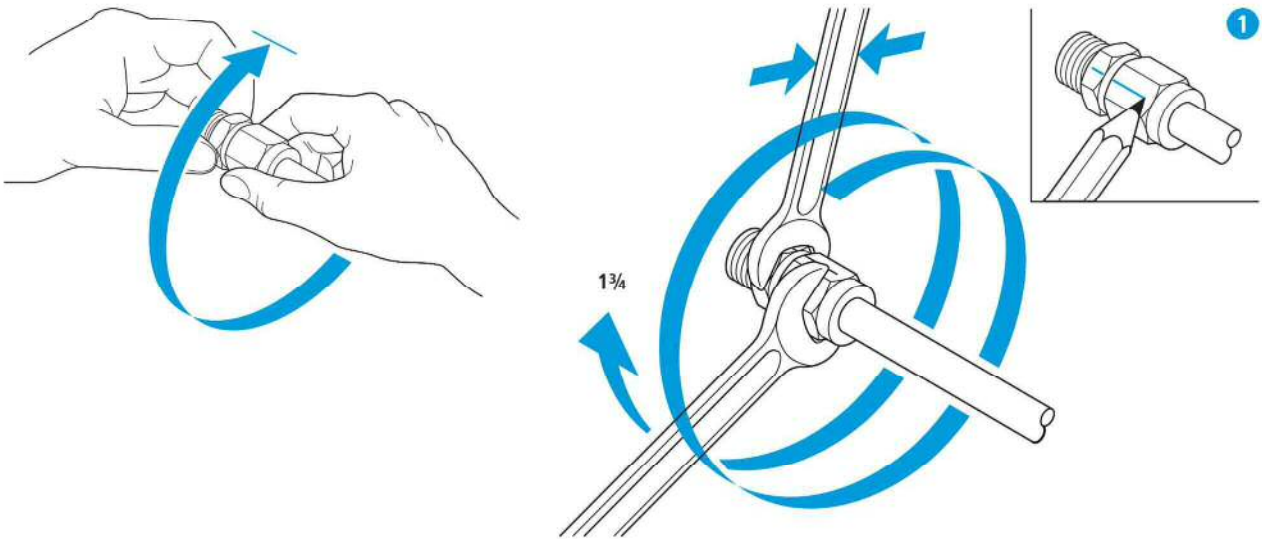
MSP VSK... (4KS)

Order designation		Dimensions				d
		d	L			
MSP VSK-4KS	■	4	32			MSP STVR ... MSP EWR ...

Illustration	Description	Dimensions	Order designation	related to
	Sealing ring	5	MSP USK-M5	■ MSP STVR... ■ MSP EWR... ■ MSP VLR... ■ MSP RVRI... ■ MSP RVR...
	Nut for clamping ring	4	MSP UCN 4	■ MSP UGVR M5-4 ■ MSP USVR M5-4
			MSP UCN 6	■ MSP UGVR G1/8-4 ■ MSP USVR G1/8-4
			MSP UCN PT1/8	■ MSP UGVR PT1/8
	Clamping ring for tube connection	4	MSP UCR 4	■ MSP UGVR M5-4 ■ MSP USVR M5-4
			MSP UCR 6-4	■ MSP UGVR G1/8-4 ■ MSP USVR G1/8-4
			MSP UCR PT1/8	■ MSP UGVR PT1/8
	Screw plug	M5	MSP VSR M5 IB2.5	■ MLU KV...
		M6x0.5	MSP VSR M6x0.5 IB3	■ MLU KV...
		M8x1	MSP VSR M8x1 IB4	■ MLU KV...
		G $\frac{1}{8}$	MSP VSR G1/8 IB5	■ MLU KV...

Initial assembly

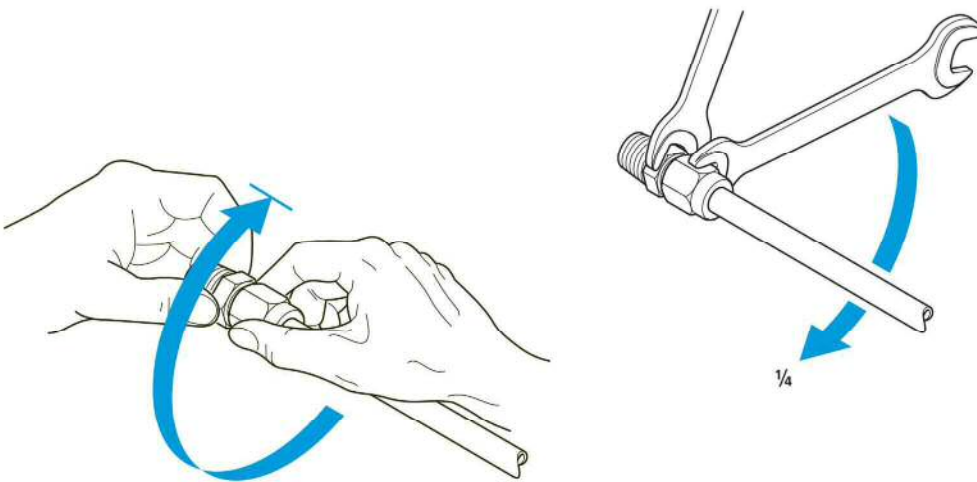
1. Screw on the union nut by hand until finger-tight. At the same time, push the tube against the fitting.
2. Tighten down the union nut through **1 3/4 rotations** using an open-end wrench.
 - ① Making a mark will assist in correct rotation. Hold the adaptor with a second wrench to prevent it turning.



Repeat assembly

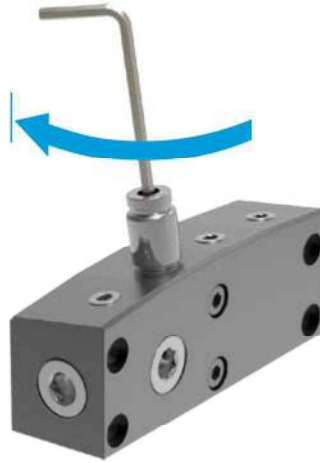
When refitting the same tube union, screw the union nut back on by hand until finger-tight and tighten down the union nut with an open-end wrench with **1/4 of a rotation** for the final fit.

In the event of repeat fitting, parts must be lubricated.



Installation of the straight plug connector

1. Screw on the straight plug connector by hand until finger-tight.
2. With the Allen key, thoroughly tighten the straight plug connector (as shown) through the opening for the connection using the force of your fingers only.

**Installation of the swivel-type plug connector**

1. Screw on the swivel plug connector by hand until finger-tight.
2. With an open-end wrench, thoroughly tighten the swivel-type plug connector (as shown) using a normal amount of force.

