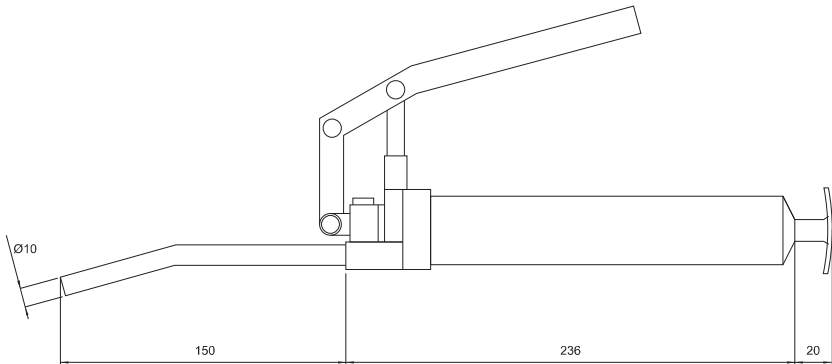


## Lubrication equipment - Grease gun

Grease gun used different nozzles installed on different oiling the supplementary grease.



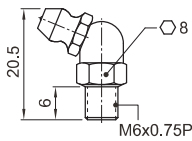
Size and working condition :

discharge pressure	15MPa
discharge rate	0.35g / stroke
weight (excluding the grease)	680g
overall length	about 400mm
width	about 120mm
outside diameter of nozzle	$\varnothing 10$ mm

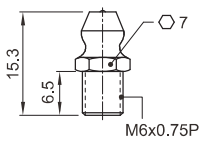
## Grease nipple and piping joint

### Grease nipple

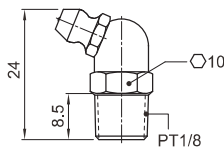
**G-M6**



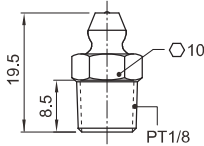
**GS-M6**



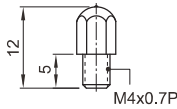
**G-PT1/8**



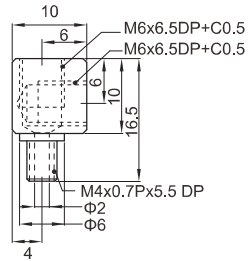
**GS-PT1/8**



**G-M4**



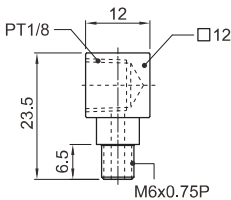
**TS-A(Connect Fitting)**



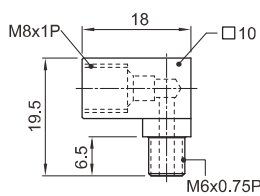
### Oil piping joint

- OL Type

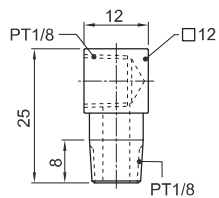
**OL-A**



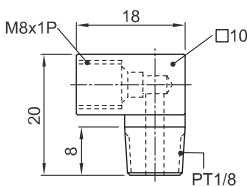
**OL-B**



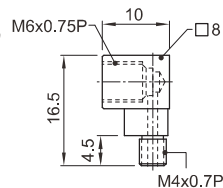
**OL-C**



**OL-D**

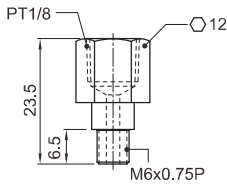


**OL-E**

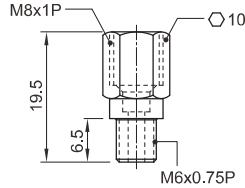


• OS Type

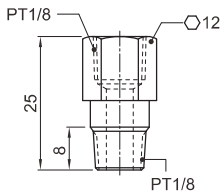
**OS-A**



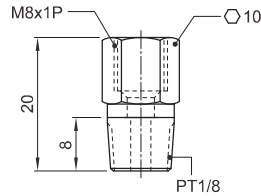
**OS-B**



**OS-C**



**OS-D**



Model No.						Dust Proof Type							
						SS		DD		ZZ		KK	
					MSG17	G-M3		G-M3M		G-M3M		G-M3L	
MSA15	MSB15	SME15		MSR20		G-M4	OL-E	G-M4L	OL-EL	G-M4L	OL-EL	G-M4L	OL-EL
MSA20	MSB20	SME20				G-M6	GS-M6	G-M6M	GS-M6M	G-M6M	GS-M6M	G-M6L	GS-M6L
MSA25	MSB25	SME25	SMR25	MSR25		OL-A	OL-B	OL-AL	OL-BLR	OL-AL	OL-BLR	OL-AL	OL-BLR
MSA30	MSB30	SME30	SMR30	MSR30		OS-A	OS-B	OS-AL	OS-BL	OS-AL	OS-BL	OS-AL	OS-BL
MSA35	MSB35	SME35	SMR35	MSR35	MSG35	G-PT1/8	GS-PT1/8	G-PT1/8L	GS-PT1/8L	G-PT1/8L	GS-PT1/8L	G-PT1/8L	GS-PT1/8L
MSA45	MSB45	SME45	SMR45	MSR45		OL-C	OL-D	OL-CL	OL-DL	OL-CL	OL-DL	OL-CL	OL-DL
MSA55			SMR55	MSR55		OS-C	OS-D	OS-CL	OS-DL	OS-CL	OS-DL	OS-CL	OS-DL
MSA65			SMR65	MSR65									

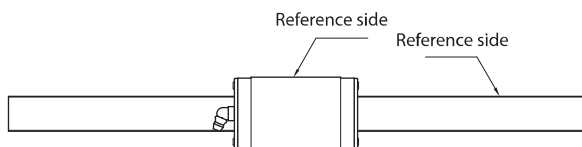
- Note:**
1. MSA15-ZZ and MSA15-DD use the nipple"G-M4"
  2. When MSB15 use the nipple "OL-E", change the nipple to "OL-EL"
  3. SMA series and MSA series use the same rail but SMA15-DD、SMA15-ZZ and SMA15-KK use the standard nipple"G-M4L".
  4. SMB series and MSB series use the same rail.
  5. MSG21 use the nipple "G-M6"series、"GS-M6"series.
  6. MSG27 use the nipple "G-M6"series、"GS-M6"series、"OL-B"series、"OS-B"series.
  7. MSR20-KK use the nipple"G-M4XL".

## The Relationship between the Direction of Lubrication and the Reference Side

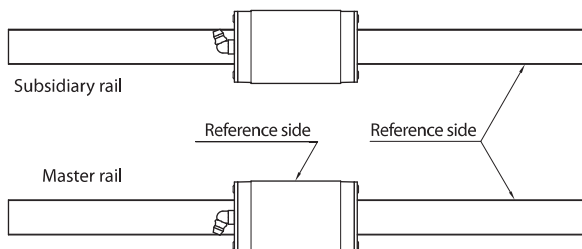
The standard lubrication fitting is grease nipple (G-M6、G-PT1/8、G-M4). The code of different types of application for lubrication fittings are shown below. For cases other than specified, please contact us for confirmation.

### The relationship between the direction of lubrication and the reference side

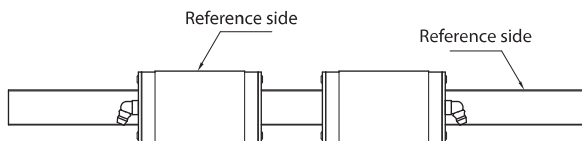
Code: C1R1



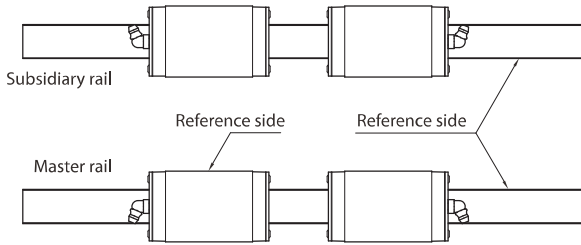
Code: C1R2



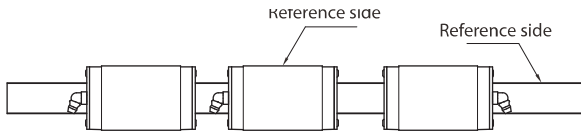
Code: C2R1



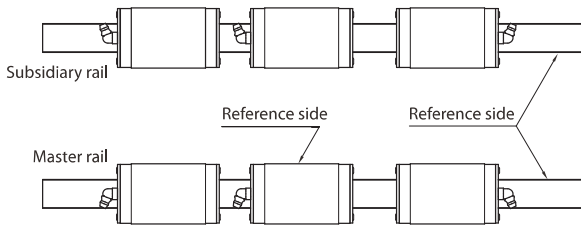
Code: C2R2



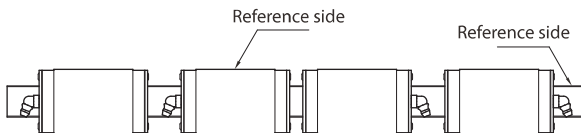
Code: C3R1



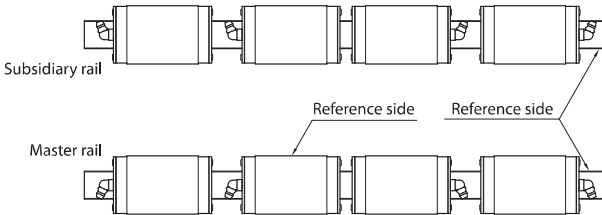
Code: C3R2



Code: C4R1



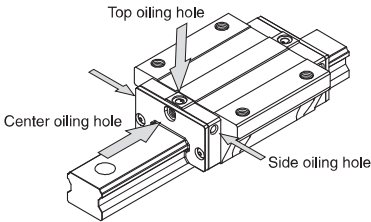
Code: C4R2



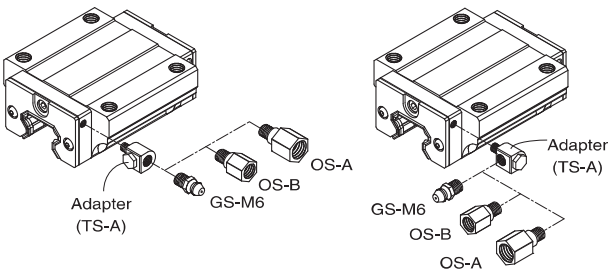
### Lubrication position

The standard mounting locating of carriage is at the center of both ends. As for lateral and top application, please specify when ordering. As shown as below, the lateral application is achieved by using a adapter to connect the grease/oil fitting to the hole on the carriage.

### Lubrication location

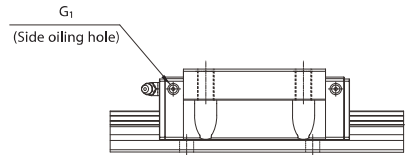
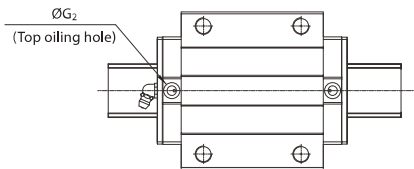


### Lateral usage



Model No.		Center	Side	
		Nipple	G1	Nipple
MSA 15	MSB 15	G-M4	M4×0.7P	G-M4
MSA 20	MSB 20	G-M6	M4×0.7P	G-M4
MSA 25	MSB 25	G-M6	M4×0.7P	G-M4
MSA 30	MSB 30	G-M6	M4×0.7P	G-M4
MSA 35	MSB 35	G-M6	M4×0.7P	G-M4
MSA 45	MSB 45	G-PT1/8	M4×0.7P	G-M4
MSA 55		G-PT1/8	M4×0.7P	G-M4
MSA 65		G-PT1/8	M4×0.7P	G-M4

Note: MSA and MSB series have no top oiling hole for option.



Model No.	Center	Side		Top	
	Nipple	G1	Nipple	G2	O-ring
MSG 17	G-M3	M3×0.5P	G-M3	-	-
MSG 21	G-M6	M4×0.7P	G-M4	-	-
MSG 27	G-M6	M4×0.7P	G-M4	6.1	P3
MSG 35	G-M6	M4×0.7P	G-M4	7.3	P4

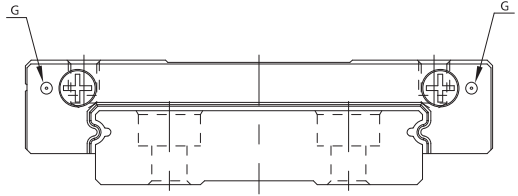
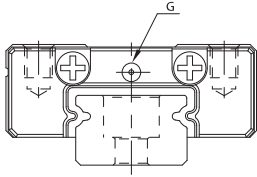
Note: Side oiling can't adopt TS-A

Model No.		Center	Side		Top	
		Nipple	G1	Nipple	G2	O-ring
-	<b>MSR 20</b>	G-M4	M4×0.7P	G-M4	9.2	P6
<b>SMR 25</b>	<b>MSR 25</b>	G-M6	M6×0.75P	G-M6	10.2	P7
<b>SMR 30</b>	<b>MSR 30</b>	G-M6	M6×0.75P	G-M6	10.2	P7
<b>SMR 35</b>	<b>MSR 35</b>	G-M6	M6×0.75P	G-M6	10.2	P7
<b>SMR 45</b>	<b>MSR 45</b>	G-PT1/8	M6×0.75P	G-M6	10.4	P7
<b>SMR 55</b>	<b>MSR 55</b>	G-PT1/8	M6×0.75P	G-M6	10.4	P7
<b>SMR 65</b>	<b>MSR 65</b>	G-PT1/8	M6×0.75P	G-M6	10.2	P7

Model No.		Center	Side		Top	
		Nipple	G1	Nipple	G2	O-ring
<b>SME 15</b>		G-M4	M4×0.7P	G-M4	-	-
<b>SME 20</b>		G-M6	M4×0.7P	G-M4	-	-
<b>SME 25</b>		G-M6	M4×0.7P	G-M4	-	-
<b>SME 30</b>		G-M6	M6×0.75P	G-M6	10.2	P7
<b>SME 35</b>		G-M6	M6×0.75P	G-M6	10.2	P7
<b>SME 45</b>		G-PT1/8	M6×0.75P	G-M6	10.2	P7

Model No.		Center	Side		Top	
		Nipple	G1	Nipple	G2	O-ring
<b>SMA 15</b>		G-M4	M4×0.7P	G-M4	7.45	P4
<b>SMA 20</b>		G-M6	M6×0.75P	G-M6	7.45	P4
<b>SMB 15</b>		G-M4	M4×0.7P	G-M4	-	-
<b>SMB 20</b>		G-M6	M4×0.7P	G-M4	6.3	P3
<b>SMB 25</b>		G-M6	M6×0.75P	G-M6	7.45	P4
<b>SMB 30</b>		G-M6	M6×0.75P	G-M6	7.45	P4





Model No.	Center oiling hole G	Note
MSC 7	Ø0.8	Syringe injection
MSC 9	Ø1.0	Syringe injection
MSC 12	Ø1.5	Syringe injection
MSC 15	G-M3	Grease gun

Model No.	Side oiling hole G	Note
MSD 7	Ø1.5	Syringe injection
MSD 9	Ø1.5	Syringe injection
MSD 12	Ø1.5	Syringe injection
MSD 15	Ø1.5	Syringe injection