

# COOLING CIRCUIT PLUGS



The volume discount rate is also applicable to alteration cost.  
All price & lead time are to be quoted.

① ② ③ ④ ⑤ ⑥

Item	① Body	② O-ring	③ Spacer	④ Metal ring	⑤ Tapered washer	⑥ Screw
M	Brass (C3604)	Fluoric rubber	Brass (C3604)	—	Brass (C3604)	Brass (C3604)

**JWP**

L	Catalog No.		U/Price
	Type	D	
10	JWP	6	Quotation
		8	
		8.5	
		10	
		11.5	
12	JWP	12	Quotation
		14	

## Features

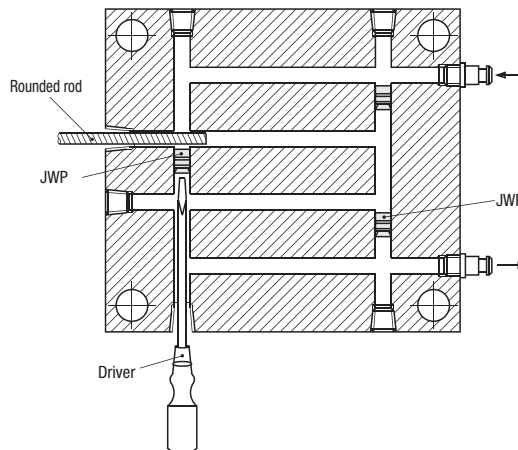
Enables free layout of cooling water circulation routes.  
Can be fixed on any place inside a cooling hole.

## Specifications

Size	D6	D8	D8.5	D10	D11.5	D12	D14
O-ring's outer diameter (reference)	6	8.2	8.7	10.2	11.7	12.2	14.2
O-ring's outer diameter tolerance (reference)	±0.25						
Cooling water hole diameter	6	8	8.5	10	11.5	12	14
Water hole diameter tolerance	+0.3 0						
Working pressure (kPa) [kgf/cm <sup>2</sup> ]	588 [6]						
Fluid	Water only						
Usable temperature range	80°C or lower (recommended)						

※Although the usable temperature range for a fluoric rubber O-ring is -15°C ~ 150°C, we recommend that the JWP Cooling Circuit Plug be used in a temperature below 80°C since its O-ring is deformed upon installation.

**ex** Example designed as shown below.



# SCREW PLUGS WITH O-RING/TAPERED SCREW PLUGS/SEALING TAPE



The volume discount rate is also applicable to alteration cost.  
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**MSWM** (Screw plug with O-ring)

M S45C  
H 32~42HRC  
Thread JIS B 0207  
S Black Oxide (Fe<sub>3</sub>O<sub>4</sub>)

H	B	t	T	L	O-ring JIS No.	Recommended Tightening Torque N · m [kgf · m]	M × Pitch	Catalog No.		U/Price
								Type	M	
16	5	3.5	4	7	P10	15.7 (1.6)	8×1.0	MSWM	8	Quotation
19.5		4		8	P12.5	19.6 (2.0)	10×1.0		10	
21		6		5	12	P14	27.5 (2.8)		12×1.5	
23	14				P16	39.2 (4.0)	14×1.5		14	
25	16				P18	63.7 (6.5)	16×1.5		16	
27	8	6		5	14	P20	78.4 (8.0)		18×1.5	
32.5			16		P22.4	112.7 (11.5)	20×1.5	20		
35			18		P25	137.2 (14.0)	22×1.5	22		
38	20	P28	201.0 (20.5)		24×1.5	24				
40	22	P30	245.0 (25.0)		27×2.0	27				

Ⓜ The O-ring conforms with JIS Class 1 B2401 (butadiene acrylonitrile rubber). Its usable temperature range is -30°C ~ 80°C

Order **Catalog No. MSWM 10** Delivery **3** Days

Quantity discount rate

Quantity	1~9	10~49	50~99	100~200
Rate	—	5%	10%	15%

Ⓜ For area out of Singapore please refer to P.i.

**MSWT** (Tapered type)  
**MSWTS** (Tapered type, stainless steel)

Thread JIS B 0203 tapered thread for tubing R (PT)  
※The thread on MSWT No. S is ANSI B2.2 tapered thread for American tubing (NPT).

MSWT M S45C  
H 32~42HRC  
S Black Oxide (Fe<sub>3</sub>O<sub>4</sub>)  
MSWTS M SUSXM7

D	a	No. of threads	Pitch	L	B	R(PT)	Catalog No.		MSWT Unit Price		MSWTS Unit Price	
							Type	No.	1~99	100~199	1~99	100~199
7.723	0.45	28	0.91	6	4	1/16	MSWT	*J	Quotation	—	—	
7.779	0.47	27	0.94	6.4		1/16		*S				
9.728	0.45	28	0.91	7	5	1/8	MSWT	1	Quotation	—	—	
13.157	0.7	19	1.34	8.9	6	1/4		2				
16.662				10	8	3/8	3					
20.955				12	10	1/2	4					
26.441	0.9	14	1.81	14	14	3/4	MSWTS	6	Quotation	—	—	
33.249				17	17	1		8				

Ⓜ No. of threads per 25.4mm. ※The thread on MSWT No. S is ANSI Standard, MSWT No. J is JIS Standard.

Order **Catalog No. MSWT J MSWT 4** Delivery **3** Days

Quantity discount rate

Quantity	1~9	10~19	20~49	50~100
Rate	—	5%	10%	15%

Ⓜ For area out of Singapore please refer to P.i.

**JST8-5** (Sealing Tape)  
**JST13-15**

Heat resistance temperature	W (width)	L (length)	t (thickness)	Catalog No.	U/Price
260°C	8mm	5m	0.1mm	JST 8-5	Quotation
	13mm	15m		JST13-15	

Order **Catalog No. JST8-5** Delivery **SGP Stock**

Quantity discount rate

Quantity	1~9	10~19	20~49	50~100
Rate	—	5%	10%	15%

Ⓜ Fluorocarbon resin (PTFE)

Ⓜ For area out of Singapore please refer to P.i.

**ex** Example

※JST8-5 is narrow and prevents from cutting protrusion when winding around screw plugs and such.