# **SAFETY COUPLER**



Safety Coupler is a welding equipment connector for Oxygen and Gas use.

#### **Features**

- Safety Coupler is fabricated as a double safety device, conveniently used during welding and cutting operations.
- Safety Couplings for Oxygen use are not interchangeable with those for Gas use.
- Safety Coupler has a special double safety sealing structure to prevent gas leaks upon connection and disconnection.
- Plug with anti-backflow check valve instantly prevents undesirable backflow of gases.
- The swivel function of Safety Couplings prevents hose twisting and provides a great convenience for welding operations.

## **Specifications**

Application Size	1/4" 5/16" 3/8" 1/2	"
Body Material	Brass	
Sealing Material	Sealing Material	Operating
/ Operating	Sealing Material	Temperature Range
Temperature	Nitrile rubber (NBR)	-20°C ~ +80°C

## **Anti-backflow Check Valve**

Туре	Piston-Type
Feature	Check Valve blocks to resist backflow of gases
Teature	and prevent failure of gas appliances.

### Instructions for use

- Soapy water or gas-tight testing device should be performed for gas leak tests before use.
- When connected or disconnected, there should be no inflammable or explosive materials around the area.
- The sealing area of the Plug which is inserted into the socket should be handled very carefully to avoid any damage.
- When couplings are badly dented in a collision, they are not connected firmly which may lead to a gas leak.
- After separation, coulpings should be stored in a clean location to keep dust or pontentially harmful foreign substances from entering the inside of the socket. The sealing area of the plug should especially be protected from any impacts.

### **Direction of fluid flow**

Fluid must flow from the side of the socket to the side of the plug.



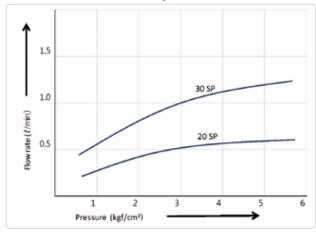
#### **Pressure**

Max. Working Pressure	7 kgf/cm²
Proof Pressure	10 kgf/cm <sup>2</sup>

#### Use

Material	Brass
	Oxygen
Applicable fluids	Air
	Acetylene
	<ul><li>Gas Welding</li></ul>
Use	<ul> <li>Gas hose connection</li> </ul>
	<ul><li>Blow pipe</li></ul>

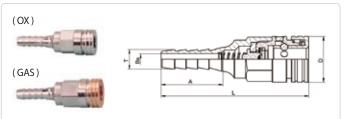
## **Pressure-Flow rate Graph**



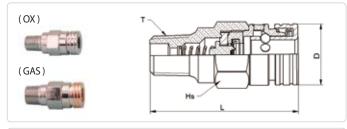
### **Application example**



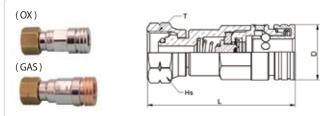
# **SAFETY COUPLER DIMENSIONS**



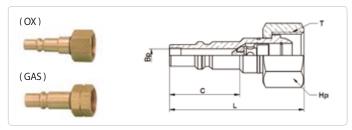
	S (SOCKET)														
	SH Type														
Tuno	Use	Model		Dime	nsions	(mm)		Application							
Type	USE	Model	L	D	Α	Т	Bs	Application							
		* SH-21	65.5	20	25	7.5	4.5	6A 1/4" HOSE							
	OX	OX	OX	OX	OX	OX	OX	OX	SH-22	64	20	29	8.6	5.0	8A 5/16" HOSE
KSSN						* SH-23	69.5	20	34	10.5	7.5	10A 3/8" HOSE			
115511		* SH-31	66.5	22	25	7.5	4.5	6A 1/4" HOSE							
	GAS	SH-32	68	22	29	8.6	5.0	8A 5/16" HOSE							
		* SH-33	74	22	34	10.5	7.5	10A 3/8" HOSE							



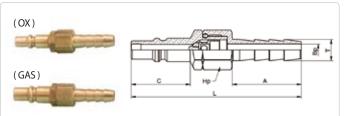
	SM Type													
Tuno	Type Use	Model		Dimension	ons (mm)		Application							
Type		Model	L	D	T	Hs								
		SM-22	48.1	20	PT 1/4"	19	8A PT 1/4"							
	OX	OX	OX	OX	OX	SM-23	48.1	20	PT 3/8"	19	10A PT 3/8"			
KSSN		SM-24	48.1	20	PT 1/2"	19	15A PT 1/2"							
NOON		SM-32	51.5	22	PT 1/4"	21	8A PT 1/4"							
	GAS	SM-33	50	22	PT 3/8"	21	10A PT 3/8"							
		SM-34	52	22	PT 1/2"	22	15A PT 1/2"							



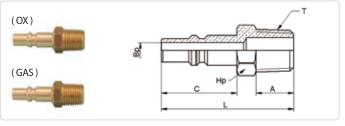
			9	F Type			
Tuno	Use	Model		Dimension	ons (mm)		Application
Type	Use	Model	L	D	T	Hs	Application
KSSN	OX	SF-22	53	20	M16 x P1.5	19	M16 x P1.5
KSSIN	GAS	SF-33	55.5	22	M16 x P1.5	19	M16xP1.5 Left



				P (PLU	G)			
				PFB Ty	pe			
Tuno	Use	Model		Dime	nsions	(mm)		Application
Type	Ose	Model	L	C	Нр	Т	Вр	Application
KSPN	OX	PFB-22	46	24	Hex 19	M16 x P1.5	5.0	M16xP1.5
KSPIN	GAS	PFB-33	46	26.5	Hex 19	M16 x P1.5	7.5	M16xP1.5 Left



	PHB Type													
Type	Use	Model		Di	mensi	ons (m	m)		Application					
турс	030	Model	L	C	Α	Нр	T	Вр	пррисации					
	OX	* PHB-21	67	24	25	14	7.5	4.5	6A 1/4" HOSE					
KSPN	UX.	PHB-22	69	24	28	14	8.6	5.0	8A 5/16" HOSE					
	GAS	* PHB-31	69	26.5	28	14	8.6	5.0	6A 1/4" HOSE					
	GAS	PHB-32	71	26.5	28	14	8.6	5.0	8A 5/16" HOSE					



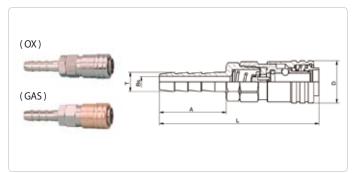
				L IAI I	ype					
Туре	Use	Model	Model Dimensions (mm)							
турс	030	Model	L	C	Α	Нр	T	Вр	Application	
	OX	PM-22	42	24	13	14	PT 1/4"	5.0	PT 1/4"	
KSPN	OX	PM-23	43	24	14	19	PT 3/8"	5.0	PT 3/8"	
	GAS	PM-32	45	26.5	13	14	PT 1/4"	7.5	PT 1/4"	
	GAS	PM-33	46.5	26.5	14	19	PT 3/8"	7.5	PT 3/8"	

(GAS)
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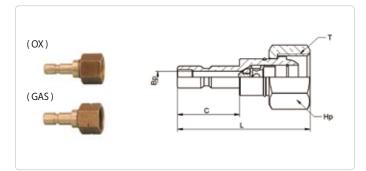
PH Type													
Llsa	Model		D	Application									
030	Model	L	C	Α	D	T	Вр	пррисацоп					
OV	* PH-21	54	24	25	11	7.5	5.0	6A 1/4" HOSE					
UX	PH-22	58	24	28	11	8.6	5.0	8A 5/16" HOSE					
CAS	* PH-31	54.5	26.5	25	14	7.5	5.0	6A 1/4" HOSE					
GAS	PH-32	58.5	26.5	28	14	8.6	5.0	8A 5/16" HOSE					
	Use OX GAS	OX * PH-21 PH-22 * PH-31	OX + PH-21 54 PH-22 58 PH-31 54.5	Use Model L C  OX PH-21 54 24  PH-22 58 24  SAS *PH-31 54.5 26.5		Use         Model         Dimensions (r           L         C         A         D           OX         PH-21         54         24         25         11           PH-22         58         24         28         11           GAS         *PH-31         54.5         26.5         25         14	Use         Dimensions (mm)           L         C         A         D         T           OX         *PH-21         54         24         25         11         7.5           PH-22         58         24         28         11         8.6           GAS         *PH-31         54.5         26.5         25         14         7.5	Use Model L C A D T Bp  OX PH-21 54 24 25 11 7.5 5.0  PH-22 58 24 28 11 8.6 5.0  **PH-31 54.5 26.5 25 14 7.5 5.0					

<sup>\*</sup> models are available upon request.

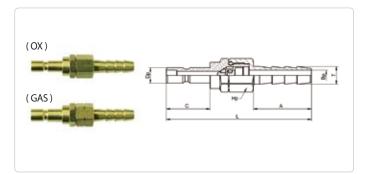
# **SAFETY COUPLER DIMENSIONS**



S (SOCKET)									
SH Type									
Typo	Use	Model		Dime	Application				
Type	Use		L	D	Α	Т	Bs	Application	
KSS -	OX	SH-20	71.5	19	30	8.6	5.0	8A 5/16"	
	GAS	SH-30	71.5	20	30	8.6	5.0	OA 3/10	



P (PLUG)										
PFB Type PFB Type										
Typo	Use	Model	Dimensions (mm)							
Type	USE	Model	L	C	Нр	Вр	T			
KSP	OX	PFB-20	45.2	21.2	19	5	M16 x P1.5			
KSP	GAS	PFB-30	45.2	21.2	19	5.8	M16 x P1.5 Left			



P (PLUG)										
PHB Type										
Tuno	Use	Model			Application					
Type	use	Model	L	C	Α	Нр	Т	Вр	Dp	Application
KSP	OX	PHB-20	70.2	21.2	28	Hex 14	8.6	5.0	7.5	
KSP	GAS	PHB-30	70.2	21.2	28	Hex 14	8.6	5.0	8.7	8A 5/16"

# **AIR FILTER COUPLER**

### **Features**

- Since Air Filter Coupler has a transparent window structure to check contamination levels of the filter, it is easy to determine replacement cycles.
- Body material(Aluminum): Lightweight, Strong and Durable.



Model	Applicabale Coupler
AF-22	AIR COUPLER SH-22
AF-35	HI-COUPLER SH-358, SH-3510,SH-3515
AF-300	HI-COUPLER SH-308, SH-310, SH-315
AF-400	HI-COUPLER SH-508, SH-510, SH-515