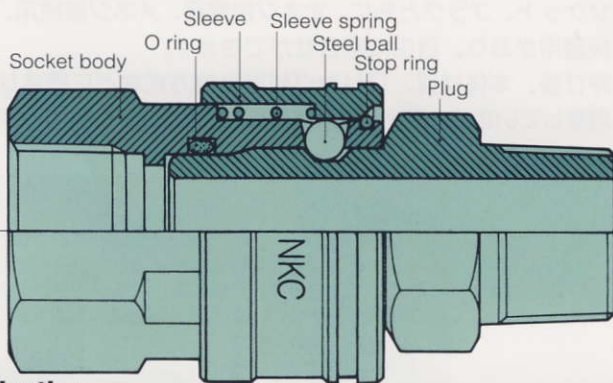


TS Series

For middle & low pressure, wide applications

Valveless type

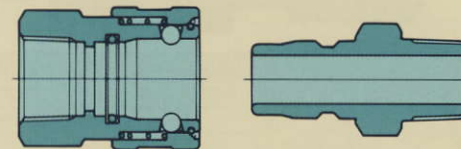


Features

- This valveless model has no valve mechanism in the socket and none in the plug. It is ideal if there is no need to shut the pipe when disconnecting the socket and plug.
- The internal construction features a low flow resistance to reduce pressure loss. This series is thus well-suited to high-viscosity fluids, steam and pulverulent bodies.
- Both the socket and plug are available with male screw connection, female screw connection and hose connection. Such connections can be combined as desired.
- Numerous models are available varying in nominal diameter, body material, O ring material and connection method. You can select precisely the best model for your application and operating conditions.

When disconnecting

When the sleeve of the socket is moved to the socket side, the steel ball can move freely in the outer circumferential direction and the plug can be removed. Since both the socket and plug have no valve mechanism, the fluid flows outward.



When connecting

If the plug is inserted while the sleeve remains on the socket side, the sleeve is returned to its former position by the force of the sleeve spring. The steel ball locks in place to ensure connection. The O ring completely prevents fluid leakage.

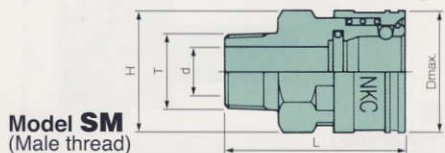
Specification

Model	TS-1	TS-2	TS-3	TS-4	TS-6	TS-8	TS-10	TS-12	TS-16
Nominal diameter	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Material of socket / plug body	Brass C3604(BsBM) / Stainless steel SUS304								
Connection method	Socket	Female thread(F) / Male thread(M) / Hose nipple(H)							
	Plug								
Working pressure MPa (Max.working pressure)	Brass	5.0 (7.5)			3.0 (4.5)		2.0 (3.0)		1.5 (2.3)
	Stainless steel	7.5 (10.0)			4.5 (6.5)		3.0 (4.0)		2.0 (3.0)
O ring material:	Standard	Viton(FMP) : -20°C~ +180°C							
Working temperature range	Optional	Nitrile rubber(NBR) : -20°C~ +80°C Neoprene(CR) : -20°C~ +80°C							
Applicable fluid	Brass	Gasoline, Heavy oil, Kerosene, Water, Steam							
	Stainless steel	Acidic fluids, Alkaline fluids, Brine							
Use	Hydraulic machine, Hydraulic piping, Water piping, Steam piping, Sea-water piping, Chemical plant, Chemicals, High pressure gas piping								

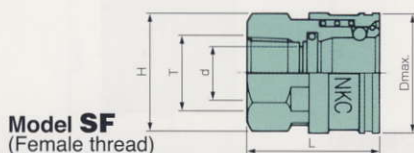
Notes

- Note that sockets can be connected to plugs only when their nominal diameters are the same.
- Sockets and plugs with large nominal diameters have a low resistance to pressure. Bear this in mind when using large sockets and plugs.
- Please specify the O ring material in accordance with the type of fluid to be piped.

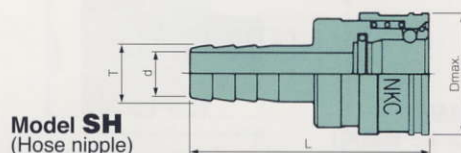
TS Series Socket (S)



Model SM
(Male thread)



Model SF
(Female thread)



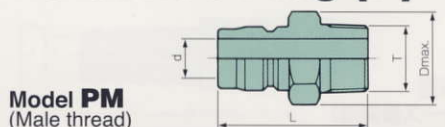
Model SH
(Hose nipple)

model	Thread size T (R)	L	Dmax. (φ)	d (φ)	H (Hex)	Brass	Stainless steel
TS-1SM	1/8"	30	18	5	14	28	27
TS-2SM	1/4"	42	24	7	19	70	65
TS-3SM	3/8"	45	28	10	23	100	93
TS-4SM	1/2"	54	35	13	29	180	166
TS-6SM	3/4"	64	45	17	35	360	335
TS-8SM	1"	74	58	24	46	680	628
TS-10SM	1-1/4"	86	69	32	54	1030	960
TS-12SM	1-1/2"	95	75	38	58	1250	1180
TS-16SM	2"	108	98	50	77	2130	2020

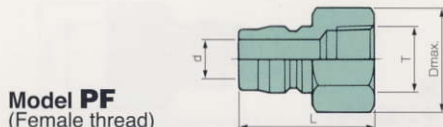
model	Thread size T (Rc)	L	Dmax. (φ)	d (φ)	H (Hex)	Brass	Stainless steel
TS-1SF	1/8"	25	18	5	14	25	24
TS-2SF	1/4"	32	24	7	19	55	50
TS-3SF	3/8"	35	28	10	23	90	83
TS-4SF	1/2"	42	35	13	29	160	148
TS-6SF	3/4"	50	45	19	35	320	300
TS-8SF	1"	59	58	26	46	525	490
TS-10SF	1-1/4"	64	69	36	54	900	825
TS-12SF	1-1/2"	71	75	42	58	1050	970
TS-16SF	2"	80	98	54	77	2850	1660

model	Hose size T	L	Dmax. (φ)	d (φ)	Brass	Stainless steel
TS-1SH	1/8"	42	18	3	28	26
TS-2SH	1/4"	57	24	5	67	63
TS-3SH	3/8"	62	28	7	105	97
TS-4SH	1/2"	71	35	10	175	162
TS-6SH	3/4"	84	45	15	337	315
TS-8SH	1"	99	58	19	640	600
TS-10SH	1-1/4"	119	69	26	1000	950
TS-12SH	1-1/2"	125	75	32	1245	1180
TS-16SH	2"	141	98	40	2400	2190

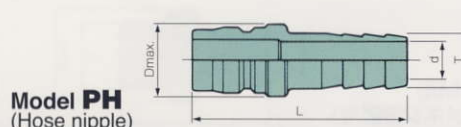
TS Series Plug (P)



Model PM
(Male thread)



Model PF
(Female thread)



Model PH
(Hose nipple)

model	Thread size T (R)	L	Dmax. (Hex)	d (φ)	Brass	Stainless steel
TS-1PM	1/8"	32	11	5	25	24
TS-2PM	1/4"	38	17	7	32	30
TS-3PM	3/8"	43	19	10	45	42
TS-4PM	1/2"	52	23	13	84	78
TS-6PM	3/4"	59	29	17	150	138
TS-8PM	1"	74	38	24	320	300
TS-10PM	1-1/4"	83	48	32	530	505
TS-12PM	1-1/2"	93	54	38	710	675
TS-16PM	2"	102	Face width 75/φ80	48	1430	1320

model	Thread size T (Rc)	L	Dmax. (Hex)	d (φ)	Brass	Stainless steel
TS-1PF	1/8"	25	14	5	13	13
TS-2PF	1/4"	32	17	7	17	16
TS-3PF	3/8"	38	21	10	45	42
TS-4PF	1/2"	44	26	13	85	78
TS-6PF	3/4"	50	35	17	177	161
TS-8PF	1"	59	41	26	265	240
TS-10PF	1-1/4"	64	53	32	610	580
TS-12PF	1-1/2"	75	58	38	750	635
TS-16PF	2"	83	Face width 77/φ82	50	1350	1180

model	Hose size T	L	Dmax. (φ)	d (φ)	Brass	Stainless steel
TS-1PH	1/8"	42	12	3	12	12
TS-2PH	1/4"	53	14	5	25	33
TS-3PH	3/8"	60	18	7	40	37
TS-4PH	1/2"	69	22	10	75	69
TS-6PH	3/4"	80	28	15	132	124
TS-8PH	1"	96	40	19	340	315
TS-10PH	1-1/4"	120	48	26	560	520
TS-12PH	1-1/2"	132	55	32	700	650
TS-16PH	2"	142	70	40	1450	1350