

ISO 16028 Interchange Couplings Connect Under Pressure



Connect Under Pressure

Series: APM

Interchange: ISO 16028

Male coupling APM series is the Stucchi solution to the problem of the connection in the presence of high internal residual pressure. Patented double internal security valve system in the male part allows the APM series to solve the problem of manual connections in the presence of high residual pressure. The APM series nipples are in accordance with ISO 16028.

- Zinc plated hardened steel
- Seals: Nitrile/Teflon standard
- NPT-SAE standard ports, others per request
- Connect with ISO 16028 coupler
- Connect up to 30 MPa/4350 psi residual pressure

Overview

Stucchi APM series male couplings will connect by hand with residual pressure up to 30 MPa/4350 psi locked in the hydraulic circuit. It will connect with residual pressure without releasing any fluid into the environment. The mating circuit will need to be without residual pressure.

Applications

Mobile equipment & attachment tools where exposure to the sun or temperature change causes pressure to develop due to thermal expansion of trapped fluid. Any application where static pressure can get locked into the system.

Advantages

- Connects under high pressure by hand
- No air inclusion during connection
- Bi-directional flow
- Elimination of fluid loss during connection or disconnection
- Easily cleaned before connection
- Interchangeable with ISO 16028

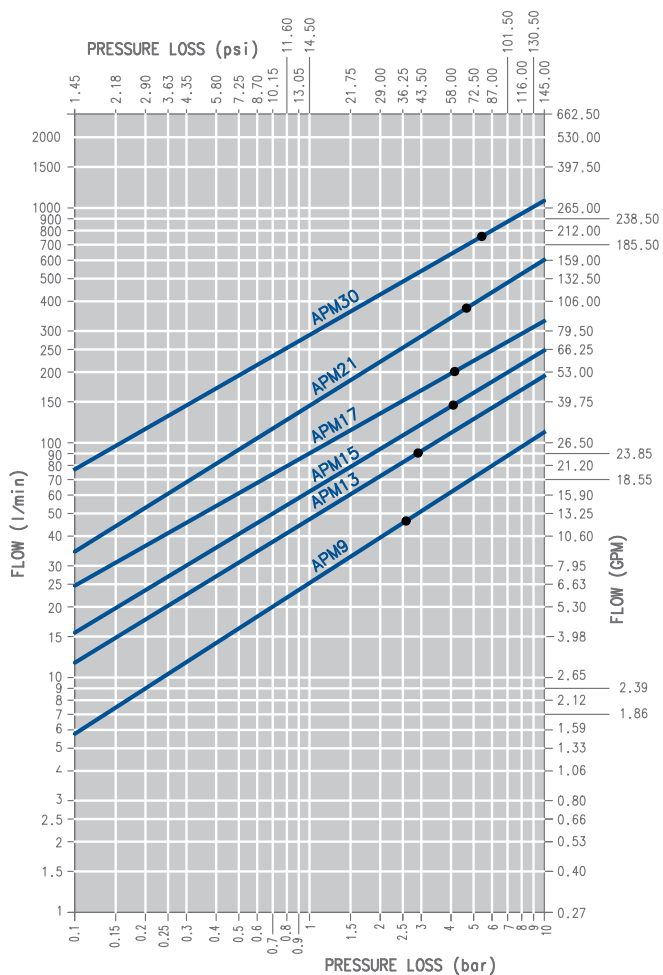
Operation

To connect, wipe the mating surfaces clean, align the coupling and nipple, push together. To disconnect, pull back the sleeve on the female and the couplers release.

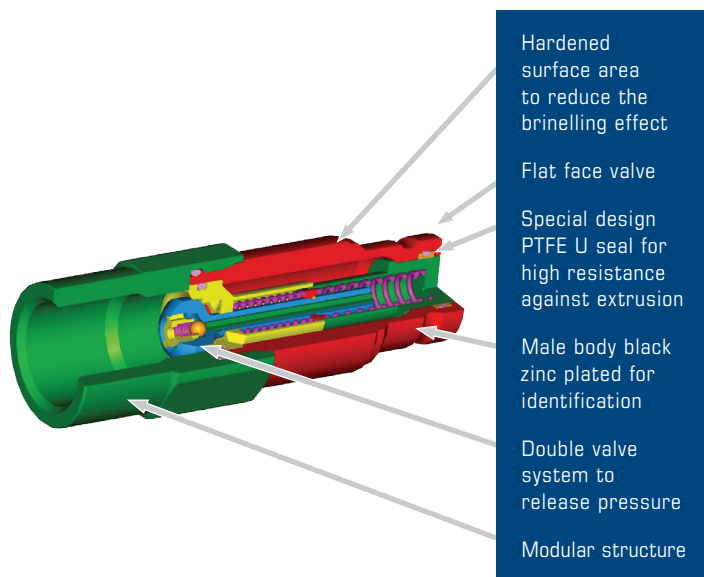


DESCRIPTION	MAX. OPERATING PRESSURE				BURST PRESSURE				MAX. RESIDUAL PRESSURE DURING CONNECTION		SPILLAGE*
	COUPLED		MALE		COUPLED		MALE		MPa	psi	
	MPa	psi	MPa	psi	MPa	psi	MPa	psi			
APM9	35	5075	35	5075	100	14500	120	17400	30	4350	0.016
APM13	33	4785	33	4785	100	14500	120	17400	30	4350	0.010
APM15	33	4785	33	4785	100	14500	120	17400	30	4350	0.120
APM17	33	4785	33	4785	100	14500	120	17400	25	3625	0.180
APM21	30	4350	30	4350	80	11600	100	14500	25	3625	0.180
APM30	27	3915	27	3915	80	11600	100	14500	20	2900	0.400

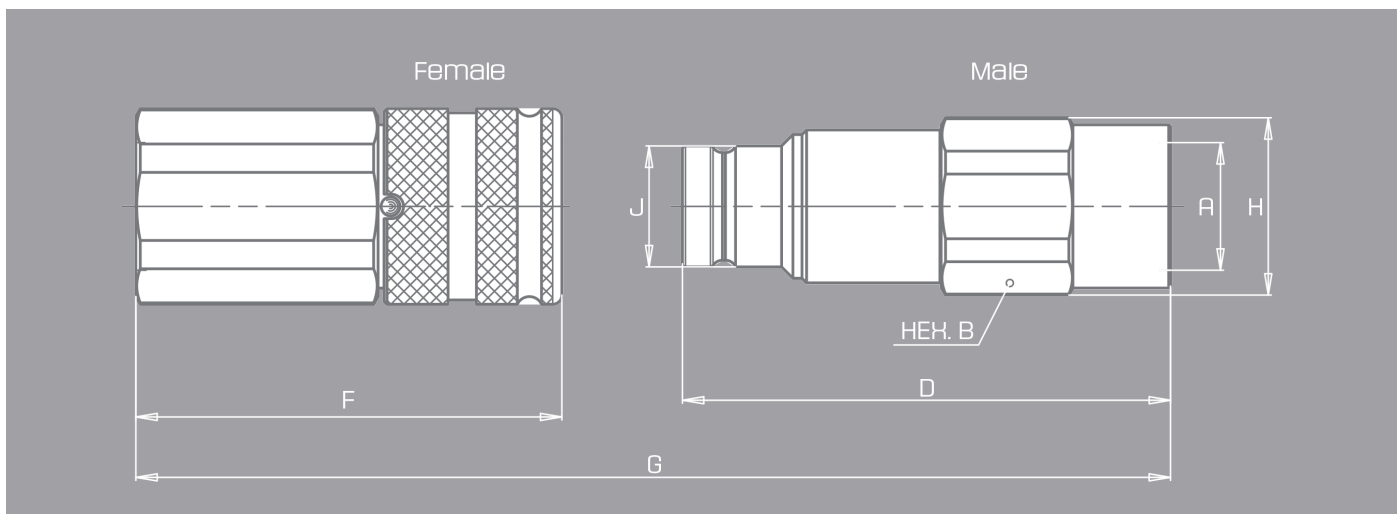
* SPILLAGE IS AN INDICATIVE VALUE OF THE FLUID LOSS PER COUPLE-UNCUPLE CYCLE TESTED WITH FEMALE COUPLINGS "A" SERIES



OIL = ISO VG32, TEMP = 40C, VISCOSITY = 28.8-35.2 MM²/S



Flat Face: APM Series Size Diagram



DESCRIPTION	BODY SIZE	A	UNIT	B	D	G	H	J	UNIT	WEIGHT
										MALE
APM9 3/8	3/8	3/8	mm	27.0	80.0	(F+D)-16	29.0	19.7	kg	0.197
			inch	1.06	3.15	(F+D)-0,630	1.14	0.78	lb	0.430
APM9 1/2	3/8	1/2	mm	27.0	82.5	(F+D)-16	29.0	19.7	kg	0.195
			inch	1.06	3.25	(F+D)-0,630	1.14	0.78	lb	0.430
APM13 1/2	1/2	1/2	mm	36.0	91.0	(F+D)-17,3	38.5	24.5	kg	0.408
			inch	1.42	3.58	(F+D)-0,681	1.52	0.96	lb	0.900
APM13 3/4	1/2	3/4	mm	36.0	93.5	(F+D)-17,3	38.5	24.5	kg	0.404
			inch	1.42	3.68	(F+D)-0,681	1.52	0.96	lb	0.890
APM15 3/4	5/8	3/4	mm	36.0	95.0	(F+D)-17,6	38.5	27.0	kg	0.426
			inch	1.42	3.74	(F+D)-0,693	1.52	1.06	lb	0.940
APM17 1	3/4	1	mm	46.0	108.5	(F+D)-22	49.8	30.0	kg	0.750
			inch	1.81	4.27	(F+D)-0,866	1.96	1.18	lb	1.650
APM21 1-1/4	1	1 1/4	mm	55.0	123.5	(F+D)-23	59.8	36.0	kg	1.160
			inch	2.17	4.86	(F+D)-0,906	2.35	1.42	lb	2.560
APM30 1-1/2	1 1/2	1 1/2	mm	70.0	146.9	(F+D)-28,6	75.8	57.0	kg	2.580
			inch	2.76	5.78	(F+D)-1,126	2.98	2.24	lb	5.690



APM NPT, SAE and BSP Thread_Nipple Connect Under Pressure | ISO 16028

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	PART DESCRIPTION
APM NPT THREAD					
NIPPLE	3/8	3/8	NPT	805201001	M. APM 9 3/8 NPT
NIPPLE	3/8	1/2	NPT	805201003	M. APM 9 1/2 NPT
NIPPLE	1/2	1/2	NPT	805201005	M. APM 13 1/2 NPT
NIPPLE	1/2	3/4	NPT	805201007	M. APM 13 3/4 NPT
NIPPLE	5/8	3/4	NPT	805201009	M. APM 15 3/4 NPT
NIPPLE	3/4	3/4	NPT	805201019	M. APM 17 3/4 NPT
NIPPLE	3/4	1	NPT	805201011	M. APM 17 1 NPT
NIPPLE	1	1 1/4	NPT	805201017	M. APM 21 1 1/4 NPT
NIPPLE	1 1/2	1 1/2	NPT	805201015	M. APM 30 1 1/2 NPT
APM SAE THREAD					
NIPPLE	3/8	1/2	SAE	805204001	M. APM 9 1/2 SAE
NIPPLE	1/2	5/8	SAE	805204003	M. APM 13 5/8 SAE
NIPPLE	1/2	1/2	SAE	805204025	M. APM 13 1/2 SAE
NIPPLE	1/2	3/4	SAE	805204005	M. APM 13 3/4 SAE
NIPPLE	5/8	3/4	SAE	805204007	M. APM 15 3/4 SAE
NIPPLE	3/4	3/4	SAE	805204027	M. APM 17 3/4 SAE
NIPPLE	3/4	1	SAE	805204009	M. APM 17 1 SAE
NIPPLE	1	1 1/4	SAE	805204017	M. APM 21 1 1/4 SAE
NIPPLE	1 1/2	1 1/2	SAE	805204015	M. APM 30 1 1/2 SAE
APM BULKHEAD THREAD					
NIPPLE	1/2	5/8	ORFS BH	805213001	M. APM 13 5/8 ORFS BH 33
NIPPLE	1/2	5/8	ORFS BH	805213003	M. APM 13 5/8 ORFS BH
NIPPLE	1/2	3/4	ORFS BH	805213005	M. APM 13 3/4 ORFS BH 39.5
NIPPLE	1/2	5/8	JIC BH	805206001	M. APM 13 5/8 JIC BH
NIPPLE	1/2	1/2	JIC BH	805206003	M. APM 13 1/2 JIC BH
APM BSP THREAD					
NIPPLE	3/8	3/8	BSP	805200001	M. APM 9 3/8 BSP
NIPPLE	3/8	1/2	BSP	805200003	M. APM 9 1/2 BSP
NIPPLE	1/2	1/2	BSP	805200005	M. APM 13 1/2 BSP
NIPPLE	1/2	3/4	BSP	805200007	M. APM 13 3/4 BSP
NIPPLE	5/8	3/4	BSP	805200009	M. APM 15 3/4 BSP
NIPPLE	3/4	1	BSP	805200011	M. APM 17 1 BSP

