Stucchi USA

stucchiusa.com/products/flat-face-couplers/apm-series/



APM SERIES

The APM Series Flat Face Couplings are state-of-the-art solutions for high residual pressure. They address residual pressure in a circuit anywhere thermal expansion of trapped fluid causes pressure to develop, and connect by hand with residual pressure, without releasing any fluid into the environment. The APM is intended to relieve pressure within itself only.

Stucchi APM Series from Stucchi USA on Vimeo.

Categories: Skid Steer Hydraulic Couplers, Flat Face Couplers Tags: Industry: Aerospace, Industry: Agricultural, Industry: Industrial, Industry: Mobile, Industry: Oil & Gas

- **Description**
- Quick Specs

DESCRIPTION

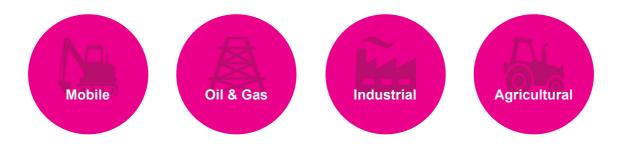
Features

- Size range: 3/8" thru 1 1/2"
- · Port options: NPT, SAE, JIC, ORFS, BSP
- Interchanges with ISO 16028

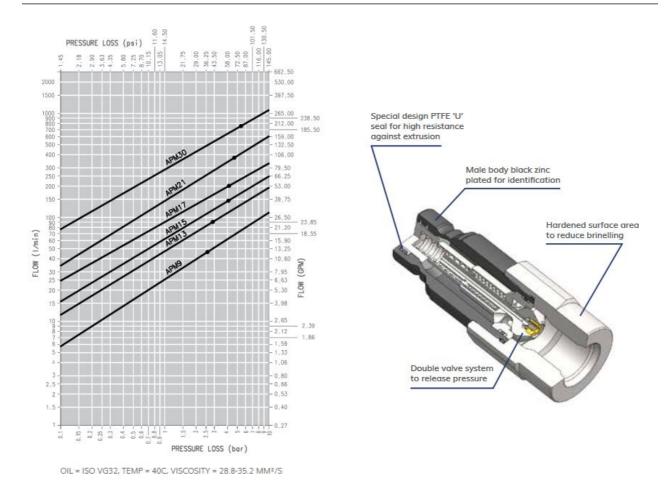
- Relieves pressure within itself only
- Connect up to 30 MPa/4350 psi residual pressure
- Connect under high pressure, by hand
- Flat face design eliminates leakage and contamination in the circuit
- · Male body black zinc plated for identification

Applications

- Mobile equipment and attachment tools, where sun exposure/temperature change causes pressure due to thermal expansion of trapped fluid
- Any application where static pressure can get locked into the system



Pressure Drop

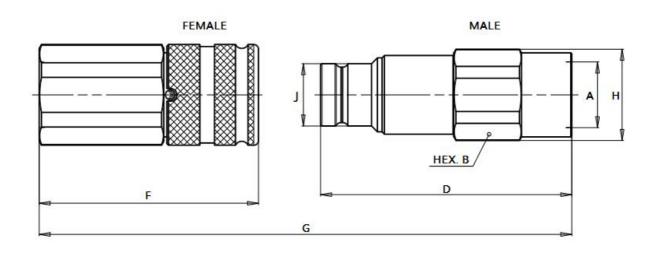


Burst Pressure

				ax		Вι	ırst Pre	essure		
			Pres	rating ssure ipled ax	COU	PLED	M	ALE	FEN	IALE
Description	Size	ISO Size	Oper	rating ssure pled	MPa COU	psi IPLED	MPa M	psi ALE	MPa FEN	psi IALE
Description	Size	ISO Size	MPa	psi	MPa	psi	MPa	psi	MPa	psi
APM9	35	5075	35	5075	100	14500	120	17400	30	4350
APM13	33	4785	33	4785	100	14500	120	17400	30	4350
APM15	33	4785	33	4785	120	14500	120	17400	30	4350
APM17	33	4785	33	4785	100	14500	120	17400	25	3625
APM21	30	4350	30	4350	80	11600	100	14500	25	3625
APM30	27	3915	27	3915	80	11600	100	14500	20	2900

^{*} Spillage is an indicative value of the fluid loss per couple-uncouple cycle.

Size Diagram



DESCRIPTION	BODY SIZE	A	UNIT	В	D	G	н	J	UNIT
			mm	27.0	80.0	(F+D)-16	29.0	19.7	kg

^{*} Tested with female couplings "A" series.

APM9 3/8	3/8	3/8	inch	1.06	3.15	(F+D)-0,630	1.14	0.78	lb
			mm	27.0	82.5	(F+D)-16	29.0	19.7	kg
APM9 1/2	3/8	1/2	inch	1.06	3.25	(F+D)-0,630	1.14	0.78	lb
			mm	36.0	91.0	(F+D)-17,3	38.5	24.5	kg
APM13 1/2	1/2	1/2	inch	1.42	3.58	(F+D)-0,681	1.52	0.96	lb
			mm	36.0	93.5	(F+D)-17,3	38.5	24.5	kg
APM13 3/4	1/2	3/4	inch	1.42	3.68	(F+D)-0,681	1.52	0.96	lb
			mm	36.0	95.0	(F+D)-17,6	38.5	27.0	kg
APM15 3/4	5/8	3/4	inch	1.42	3.74	(F+D)-0,693	1.52	1.06	lb
			mm	46.0	108.5	(F+D)-22	49.8	30.0	kg
APM17 1	3/4	1	inch	1.81	4.27	(F+D)-0,866	1.96	1.18	lb
			mm	55.0	123.5	(F+D)-23	59.8	36.0	kg
APM21 1-1/4	1	1 1/4	inch	2.17	4.86	(F+D)-0,906	2.35	1.42	lb
			mm	70.0	146.9	(F+D)-28,6	75.8	57.0	kg

APM Accessories – Nipple Dust Cap

PORT SIZE	ORDER CODE	DESCRIPTION
3/8	815100003	CAP M. APM9/A9
3/8, 1/2	815100005	CAP M. APM9/A9
1/2	815100007	CAP M. APM13/A13
1/2, 5/8, 3/4	815100009	CAP M. APM13/A13
3/4	815100011	CAP M. APM15/A15
3/4, 1	815100013	CAP M. APM17/A17
1, 1 1/4	815100015	CAP M. APM21/A21
1 1/2	815100017	CAP M. APM30/A30

APM NPT, SAE, Bulkhead, and BSP Thread – Nipple Connect Under Pressure | ISO 16028

PART B SIZI		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 BULKHE	AD THREAD	
NIPPLE	1/2	5/8	ORFS BH	805213001	M. APM 13 5/8 ORFS BH 33

PART BO		PORT SIZE	THREAD TYPE	ORDER CODE	PART DESCRIPTION
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

Repair Kits

ORDER CODE	DESCRIPTION
APM S	ERIES
815700003	KIT M. APM9
815700005	KIT M. APM13
815700007	KIT M. APM 15
815700009	KIT M. APM 17
815700011	KIT M. APM 21
815700013	KIT M. APM 30

ADDITIONAL INFORMATION

Body Size

<u>1/4"</u>, <u>3/8"</u>, <u>1/2"</u>, <u>5/8"</u>, <u>3/4"</u>, <u>1"</u>, <u>1 1/4"</u>, <u>1 1/2"</u>

Material	<u>Carbon</u>			
Port Options	BSP, JIC, NPT, ORFS, SAE			
Port Size	<u>3/8", 1/2", 5/8", 3/4", 1", 1 1/4", 1 1/2"</u>			
Valve Style	Flat Face			
Working Pressure	<u>Up to 5000</u>			

Related products

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VEPHDL SERIES

The VEPHDL Series Heavy-Duty
Locking Flat Face Coupler is the
ultimate failsafe solution for the most
demanding hydraulic applications. This
locking female version is
interchangeable with standard VEPHD
series flat face thread-to-connect heavy
duty couplers and features a visual
connection indicator for foolproof
connection, every time.



A-ZN SERIES

The A-ZN Series Flat Face Couplings

utilize specialized plating for high corrosion resistance, designed to exceed the ISO salt spray test.

Standard zinc plating is rated for 400 hours before red spotting. The Z version offers higher pressure and superior flow ratings with a lower pressure drop compared to competitors' products. The ZN version plating is designed to exceed 1000 hours before the appearance of red spotting in the same ISO salt spray test.



GR PLATE SERIES

The GR Series of Multi-Coupling
Plates allows the simultaneous couple
and uncouple of two to ten hydraulic
and/or electrical lines with a single,
simple movement requiring very little
force. The circuit lines can all have the
same nominal coupler diameter and
different media or different size
couplers. A dust cap is supplied, and
options include: an electrical connector
for low voltage requirements and a
parking station. Watch this quick video
on How to Connect and Disconnect
Hydraulic and Electrical Lines using the
GR Series of Multi-Coupling Plates.



FL SERIES

The FL Series Flat Face Couplings are designed with high corrosion resistance and excellent fatigue life. The FL couplings are manufactured in 316 stainless steel to eliminate leakage during connection/disconnection, reduce contamination in the circuit, and offer optimal resistance to corrosion. Standard seals are Viton/Fluorocarbon; other materials available for various fluids and operating temperatures.