FAV

SPECIAL SERIES

Stucchi®



Technical specifications and options

Interchange
Stucchi profile

Sealing description
FKM (VITON®)

Connection system
By customer manifold

Available sizes
From 1/8" to 1/2 "

Material /treatment
Carbon Steel with QPQ and Stainless steel AISI303

Available threads
METRIC

Operating pressure
Up to 300 bar

Locking mechanism
Cartridge for manifold

Flow rate
Up to 90 l/min

Temperature
-15°C / +180°C

Valving style
Flat face

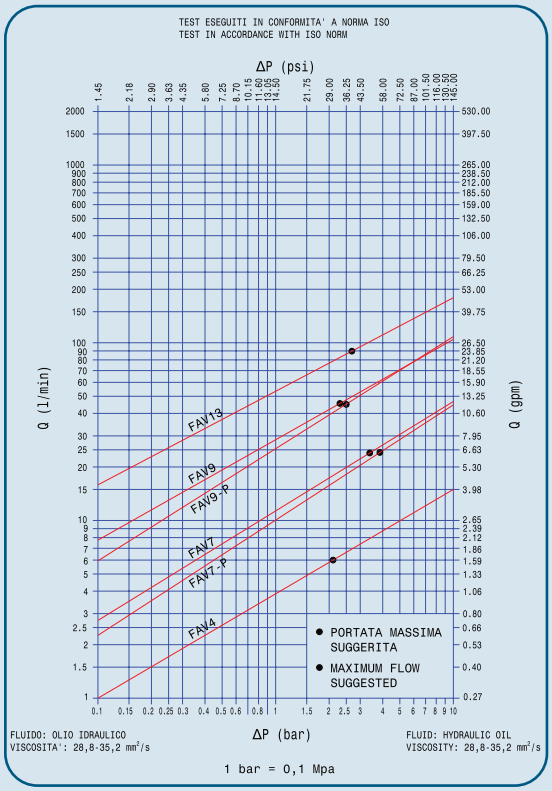
Connection under pressure
Not allowed for standard version (Allowed only for P version)

Benefits

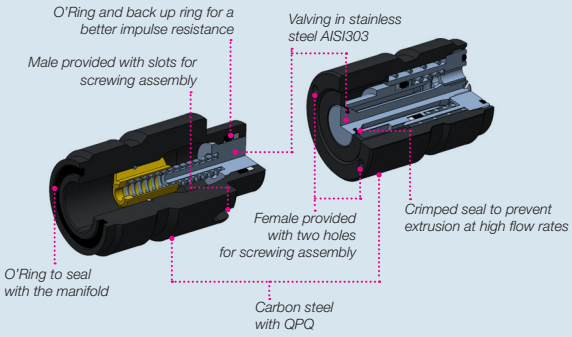
- Designed to be used in custom manifold for automatic connection.
- Designed to be used in hydraulic fluid power application and fluid lines.
- Suitable to be used with hydraulic oil, water or water&glycol lines.
- Available also in "P" version to be connected under residual pressure (male and female valving with steel to steel sealing system).
- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Minimal fluid loss during disconnection eliminating environment pollution.
- Minimal air inclusion during connection.
- Compact slim design.
- Safe and simple to use.

How to use

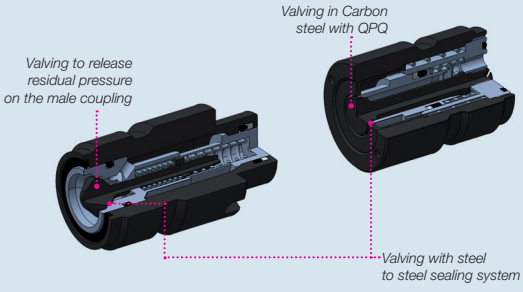
- Screw the parts in the correspondant manifold cavity (threaded hole) until the contact with the surface bottom.
- Apply the correct torque to tight the coupling in the manifold.
- The coupling are provided with slot & holes on the frontal face to allow the screwing operation (see drawing) to screw the parts can be used the special tightening tool (on request).
- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- Connect male and female by moving the two manifold parts one against the other in a smooth way.
- The connection and disconnection speed must not exceed the 5 mm/sec.
- After connection the faces of the manifold must to be in contact.



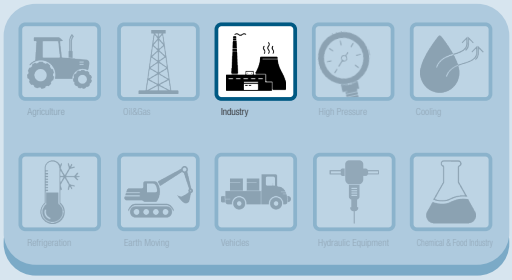
FAV features:



FAV-P features: same as FAV, in addition:



MAIN APPLICATIONS



Stucchi®

Performances

Size	Series	Max. flow suggested		Connect force		Manual tightening torque		Spillage*	Max. operating pressure						Hydrostatic pushing area coupled	
									Coupled		Male		Female			
Inch		l/min	GPM	N	lbf	Nm	lbf ft	ml	MPa	psi	MPa	psi	MPa	psi	cm²	in²
1/8	FAV4	6	1,56	98	22	25	18,44	0,01	30	4350	30	4350	30	4350	0,45	0,07
1/4	FAV7	24	6,34	153	34	50	36,88	0,01	30	4350	30	4350	12	1740	0,72	0,11
3/8	FAV9	46	12,15	147	33	70	51,63	0,01	30	4350	30	4350	15	2175	1,23	0,19
1/2	FAV13	90	23,78	201	45	90	66,38	0,02	25	3625	25	3625	12	1740	1,89	0,29

FAV-P version suitable to be connected under residual pressure

Size	Series	Max. flow suggested		Connect force		Manual tightening torque		Spillage*	Max. operating pressure						Max. residual pressure in one side**		Hydrostatic pushing area coupled	
									Coupled		Male		Female					
Inch		l/min	GPM	N	lbf	Nm	lbf ft	ml	MPa	psi	MPa	psi	MPa	psi	MPa	psi	cm²	in²
1/4	FAV7P	24	6,34	168	38	50	67,79	0,01	30	4350	30	4350	12	1740	25	3625	0,72	0,11
3/8	FAV9P	46	12,15	145	33	70	94,91	0,01	30	4350	30	4350	15	2175	25	3625	1,23	0,19

* Spillage is an indicative value of the fluid loss per couple-uncouple cycle (according to ISO norm test method).
** It is suggested to release pressure in one side before to connect.

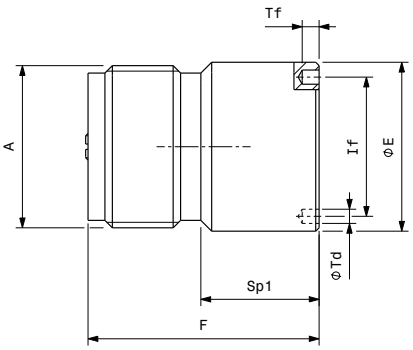
The force to keep the part together is equal to the Connect Force + Hydrostatic Pushing Area x Pressure in Connected condition.

Temperature range:
Seals in FKM (Viton): from -15 °C to +180 °C (from -4 °F to +212 °F).
Please read carefully Instructions and warnings for proper selection of the products.

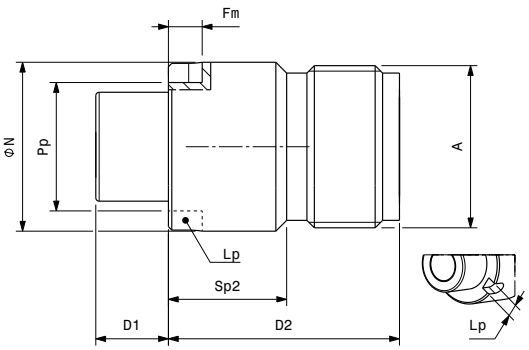


Overall dimensions

Female



Male



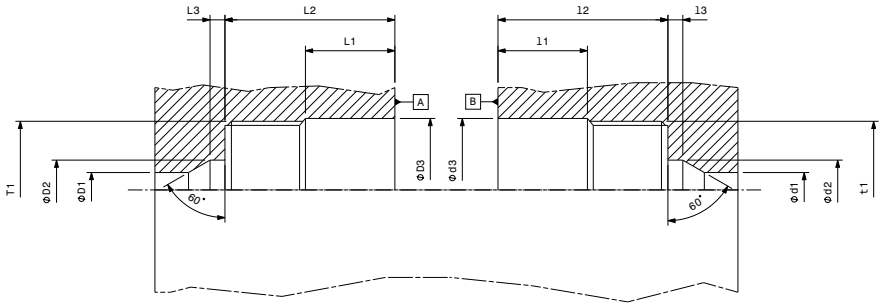
FAV quick couplings dimensions

Size	Descriptive code	Item code	Length			Length			Diameter			Diameter		Diameter			Length			Diameter			Weight	
				mm	in		mm	in		mm	in				mm	in		mm	in		mm	in	Kg	lb
1/8”	F FAV4	804024100	F	27,4	1,08	Sp1	12,0	0,47	E	21,0	0,83	A	M20X1,5	If	16,0	0,63	Tf	2,0	0,08	Td	2,1	0,08	0,06	0,12
1/8”	M FAV4	804024101	D1+D2	7,9 + 27,4	-	Sp2	12,0	0,47	N	21,0	0,83			Pp	15,0	0,59	Fm	4,5	0,18	Lp	4,0	0,16	0,06	0,12
1/4”	F FAV7	804024108	F	34,2	1,35	Sp1	17,5	0,69	E	25,0	0,98	A	M24X1,5	If	20,6	0,81	Tf	2,5	0,10	Td	2,1	0,08	0,09	0,20
1/4”	M FAV7	804024109	D1+D2	10,7 + 34,2	-	Sp2	17,5	0,69	N	25,0	0,98			Pp	19,0	0,75	Fm	5,0	0,20	Lp	4,0	0,16	0,11	0,23
1/4”	F FAV7P	804024102	F	34,2	1,35	Sp1	17,5	0,69	E	25,0	0,98	A	M24X1,5	If	20,6	0,81	Tf	2,5	0,10	Td	2,1	0,08	0,09	0,20
1/4”	M FAV7P	804024103	D1+D2	10,8+34,2	-	Sp2	17,5	0,69	N	25,0	0,98			Pp	19,0	0,75	Fm	5,0	0,20	Lp	4,0	0,16	0,11	0,23
3/8”	F FAV9	804024112	F	46	1,81	Sp1	22,0	0,87	E	27,0	1,06	A	M26X1,5	If	23,5	0,93	Tf	2,5	0,10	Td	2,1	0,08	0,13	0,28
3/8”	M FAV9	804024113	D1+D2	15,8 +46	-	Sp2	22,0	0,87	N	27,0	1,06			Pp	21,0	0,83	Fm	5,0	0,20	Lp	4,0	0,16	0,16	0,34
3/8”	F FAV9P	804024104	F	46	1,81	Sp1	22,0	0,87	E	27,0	1,06	A	M26X1,5	If	23,5	0,93	Tf	2,5	0,10	Td	2,1	0,08	0,13	0,29
3/8”	M FAV9P	804024105	D1+D2	15,9+46	-	Sp2	22,0	0,87	N	27,0	1,06			Pp	21,0	0,83	Fm	5,0	0,20	Lp	4,0	0,16	0,15	0,34
1/2”	F FAV13	804024106	F	50,7	2,00	Sp1	19,0	0,75	E	33,0	1,30	A	M32X1,5	If	29,0	1,14	Tf	2,5	0,10	Td	2,1	0,08	0,20	0,43
1/2”	M FAV13	804024107	D1+D2	17,2+43,7	-	Sp2	19,0	0,75	N	33,0	1,30			Pp	26,0	1,02	Fm	6,0	0,24	Lp	5,0	0,20	0,19	0,42

Max. allowed tolerance of the diameters E and N is h7.

Overall dimensions

Female Male



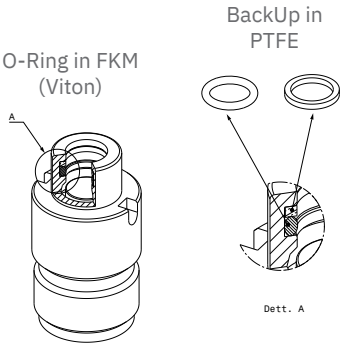
Housing dimensions

Size	Descriptive code	Item code	Length			Length			Length			Diameter			Diameter			Diameter			Diameter
				mm	in		mm	in		mm	in		mm	in		mm	in		mm	in	
1/8”	F FAV4	804024100	L1	12,5	0,49	L2	27,4	1,08	L3	3	0,12	D1	4	0,16	D2	8,0	0,31	D3	21,0	0,83	T1	20X1,5
1/8”	M FAV4	804024101	l1	12,5	0,49	l2	27,4	1,08	l3	3	0,12	d1	4	0,16	d2	8,0	0,31	d3	21,0	0,83	t1	20X1,5
1/4”	F FAV7	804024108	L1	18,0	0,71	L2	34,2	1,35	L3	3	0,12	D1	7	0,28	D2	12,0	0,47	D3	25,0	0,98	T1	24X1,5
1/4”	M FAV7	804024109	l1	18,0	0,71	l2	34,2	1,35	l3	3	0,12	d1	7	0,28	d2	12,0	0,47	d3	25,0	0,98	t1	24X1,5
1/4”	F FAV7P	804024102	L1	18,0	0,71	L2	34,2	1,35	L3	3	0,12	D1	7	0,28	D2	12,0	0,47	D3	25,0	0,98	T1	24X1,5
1/4”	M FAV7P	804024103	l1	18,0	0,71	l2	34,2	1,35	l3	3	0,12	d1	7	0,28	d2	12,0	0,47	d3	25,0	0,98	t1	24X1,5
3/8”	F FAV9	804024112	L1	22,5	0,89	L2	46,0	1,81	L3	6	0,24	D1	9	0,35	D2	15,5	0,61	D3	27,0	1,06	T1	26X1,5
3/8”	M FAV9	804024113	l1	22,5	0,89	l2	46,0	1,81	l3	6	0,24	d1	9	0,35	d2	15,5	0,61	d3	27,0	1,06	t1	26X1,5
3/8”	F FAV9P	804024104	L1	22,5	0,89	L2	46,0	1,81	L3	6	0,24	D1	9	0,35	D2	15,5	0,61	D3	27,0	1,06	T1	26X1,5
3/8”	M FAV9P	804024105	l1	22,5	0,89	l2	46,0	1,81	l3	6	0,24	d1	9	0,35	d2	15,5	0,61	d3	27,0	1,06	t1	26X1,5
1/2”	F FAV13	804024106	L1	20,0	0,79	L2	50,7	1,99	L3	8	0,31	D1	13	0,51	D2	21,0	0,83	D3	33,0	1,30	T1	32X1,5
1/2”	M FAV13	804024107	l1	20,0	0,79	l2	50,7	1,99	l3	8	0,31	d1	13	0,51	d2	21,0	0,83	d3	33,0	1,30	t1	32X1,5

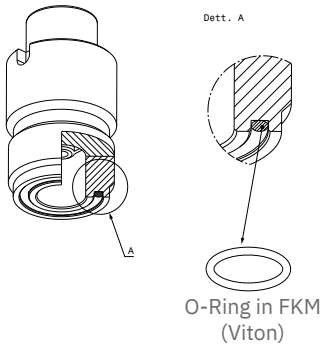
Max allowed tolerance of holes D3 and d3 is H7.
Max allowed tolerance of holes length L2 and l2 is +0.1 mm.
Max allowed tolerancies between male and female interaxis (misalignment): +/- 0.04 mm.
Max perpendicularity error between the hole D3-T1/d3-t1 and the plan A/B= 0,02 mm.
Max concentrity error between diameter T1&D3 and between t1&d3 = 0,02 mm.
After connection the plan A and B must to be in contact.
The system has to be provided with guiding devices to allow the correct alignment&function of the parts.

Spare parts

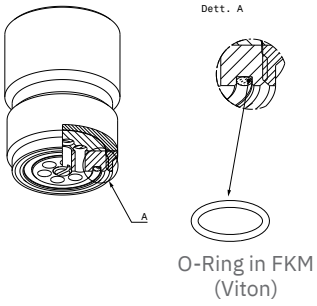
Repair kit / OR+BK FOR MALE		
Body size	Description	Part number
1/8	SPARE KIT OR VITON+BK M FAV4	815701325
1/4	SPARE KIT OR VITON+BK M FAV7	815700523
3/8	SPARE KIT OR VITON+BK M FAV9	815700247
1/2	SPARE KIT OR VITON+BK M FAV13	815700249



Repair kit / OR FOR MALE - BACK SIDE		
Body size	Description	Part number
1/8	SPARE KIT OR VITON BACK SEAL M FAV4	815701327
1/4	SPARE KIT OR VITON BACK SEAL M FAV7-FAV7P	815701329
3/8	SPARE KIT OR VITON BACK SEAL M FAV9-9P	815701331
1/2	SPARE KIT OR VITON BACK SEAL M FAV13	815701333



Repair kit / OR FOR FEMALE - BACK SIDE		
Body size	Description	Part number
1/8	SPARE KIT OR VITON BACK SEAL F FAV4	815701326
1/4	SPARE KIT OR VITON BACK SEAL F FAV7-FAV7P	815701328
3/8	SPARE KIT OR VITON BACK SEAL F FAV9-9P	815701330
1/2	SPARE KIT OR VITON BACK SEAL F FAV13	815701332



WARNING

Stucchi FAV couplings are intended to be used for connecting hydraulic fluid power circuit of industrial equipments.
Do not use Stucchi FAV couplings with dangerous, flammable or explosive fluids.
A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.
Connect under pressure FAV-P products are suitable to be connected under residual (static) pressure.
Never connect or disconnect with dynamic pressure (e.g. pump on).
Do not use the female coupling disconnected with high impulse pressure.
Do not couple-uncouple with flow in the circuit.
Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).
It is important to limit contamination in the circuit to avoid compromising the function of the internal valves.
Make sure that the medium used is compatible with seal and material as indicated for each series.
In case of doubt please contact Stucchi Technical Support.
It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.
Always refer to the version uploaded in the Instructions and warning section of stucchigroup.com website for the latest release.
For specific, product-related, instructions, please contact Stucchi technical service.

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