

# Quick Couplings for Skydrol

SPECIAL SERIES



Aircraft have installed a multitude of complex and sophisticated systems on board, which can represent between 40% and 60% of the weight of the aircraft.

**In addition to electrical, air conditioning, pneumatic and fuel systems, the hydraulic fluid power system is an integral part for the operation of the aircraft. This system allows the operation of many other systems and components of the aircraft itself, such as landing gear, doors, flight controls and stairs.**

The on-board hydraulics of aircraft and aeronautical equipment require the use of special hydraulic fluids, very different from the standard hydraulic fluid power oils used in agricultural and earth-moving applications: the hydraulic oil used for these applications must in fact be not inflammable and work at different operating temperatures, as well as many other requests in the strict approvals of the manufacturers.

These fluids, however, possess chemical and physical characteristics that make them incompatible with the typical connections (flexible hoses, seals, quick couplings...) available on the market.

**For these reasons, the connections on the plane are made of special materials and gaskets, carefully selected, certified, tested and approved to be assembled on board the aircraft.**

However, there are a multitude of hydraulic devices that are used on the ground. These operate when the plane is on the ground. This equipment includes: powerpacks for the maintenance, control and testing on the ground of the hydraulic system on board the aircraft, such as the operation of landing gears, testing flaps, etc.

There are also many applications of these devices for testing, repairing and checking the functioning of components that will be assembled on aircraft, to be made on special test benches.

**For applications of this type of ground equipment, there is the problem of how to connect and disconnect flexible hoses and hydraulic lines quickly and easily. Suitable quick couplings containing compatible seals with the fluids mentioned above can be difficult to find in the market.**

# The stucchi solution for Skydrol

SPECIAL SERIES



**Thanks to the close and fruitful collaboration with OEMs present in this field, Stucchi has studied, tested and put on the market several series of products that meet the strict and demanding requests for the hydraulic connection of ground equipment.**

We can enumerate the following three series of flat face products: A-SK, VP-SK, VEP-SK.

Here the main features of the three series:

- Dimensions from 1/4 to 1-1/2
- Working pressures up to 500 bar
- Flow up to 750 l/m
- Valves with flat faces design
- Special sealing compatible with Skydrol® oil

Suitable applications:

- Ground equipment
- Wheeled Powerpack and fixed stand for maintenance and testing of aeronautical hydraulic systems
- Test benches

**“A-SK”** Series is the evolution of Stucchi technology and quality applied to flat face couplings. The series has an internal design with high resistance material to allow the achievement of higher operating pressure whilst maintaining minimal pressure drop. These features make “A-SK” Series couplings the leader in this application where high performance is necessary

with the elimination of fluid loss and contamination in the circuit.

The **“VP-SK”** screw flat face coupling series is the technological solution to demanding hydraulic applications. The screw connection system eliminates premature wear and the “brinelling” caused by a mechanical locking ball system.

This makes the “VP-SK” series suitable for high operating and impulse pressures.

The flat face design is smartly avoiding fluid loss.

The safety sleeve integrated in the connection system prevents accidental disconnection making the “VP-SK” Series ideal for the most extreme operating conditions where strong vibration and torsion issues are present.

The **“VEP-SK”** screw flat face coupling series is another example of the continuous improvement of Stucchi products. Designed for heavy duty applications with high operating pressure, high impulse frequency, and mechanical stress.

The “VEP-SK” couplings are manufactured in high resistance carbon steel material treated with special nitriding treatment to increase the wear resistance of the coupling. Minimal fluid loss and air inclusion during the connection-disconnection process is another strength of its design.

Consult the respective catalogs.



## Technical specifications and options

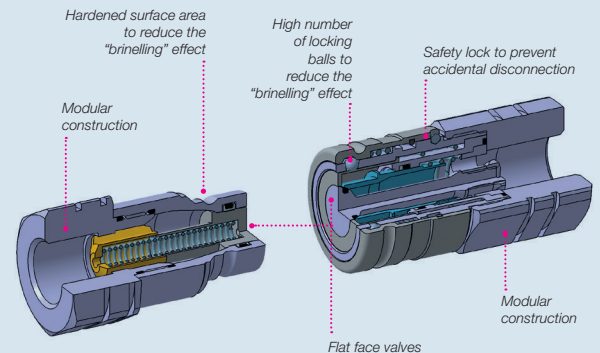
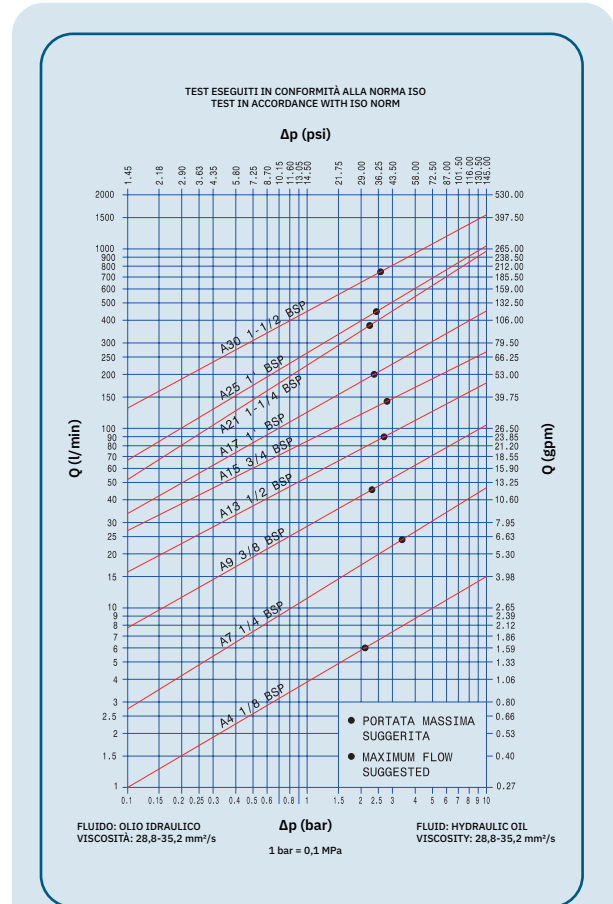
 <b>Interchange</b> ISO 16028 NFPA T3.20.15 HTMA (size 3/8")	 <b>Sealing description</b> Special seal for Skydrol®	 <b>Connection system</b> Push
 <b>Available sizes</b> from 1/4" to 1-1/2"	 <b>Material /treatment</b> Carbon steel/Cr3 (Zi-Ni version available)	 <b>Available threads</b> BSP other thread on request
 <b>Operating pressure</b> Up to 420 bar	 <b>Locking mechanism</b> Locking ball + Safety Lock	 <b>Flow rate</b> Up to 750 L/Min
 <b>Temperature</b> -20°C / +100°C	 <b>Valving style</b> Flat face	 <b>Connection under pressure</b> Connection: not allowed Disconnection: not allowed

## Benefits

- Ideal solution for ground equipment and test bench to be used in the aircraft industry.
- Special seals compatible with **Skydrol® 500B-4**, **Skydrol® LD-4** and **Skydrol® 5** to be used on test bench and ground equipment.
- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Minimal fluid spillage during disconnection, reducing fluid spillage to the environment.
- Minimal air inclusion during connection.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- The modular design allows flexibility with a wide range of configurations.
- Good resistance to pressure impulses.
- Compact slim design.
- Safe and simple to use.

## How to use

- Before connecting, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect, push the male half towards the female half or vice versa.
- After connection, turn the external sleeve to engage safety lock function, to prevent accidental disconnection.
- To disconnect, turn the external sleeve until the sleeve lock notch match the safety lock ball and push back the sleeve.



## MAIN APPLICATIONS



## Performances

Size		Series/Size	Max. flow suggested		Connect force		Disconnect force		Spillage*
Inch	mm (ISO)		l/min	GPM	N	lbf	N	lbf	
1/4	6,3	A7SK	24	6,36	150	33,75	45	10,13	0,01
3/8	10,0	A9SK	46	12,19	170	38,25	40	9,00	0,01
1/2	12,5	A13SK	90	23,85	190	42,75	50	11,25	0,02
5/8	16,0	A15SK	148	39,22	190	42,75	55	12,38	0,02
3/4	19,0	A17SK	200	53,00	220	49,50	70	15,75	0,03
1	25,0	A21SK	378	100,17	250	56,25	75	16,88	0,03
1-1/2	-	A30SK	750	198,75	390	87,75	70	15,75	0,05

Size		Max. operating pressure						Burst pressure					
		Coupled		Male		Female		Coupled		Male		Female	
Inch		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
1/4	A7SK	42	6090	42	6090	42	6090	126	18270	126	18270	126	18270
3/8	A9SK	35	5075	35	5075	35	5075	100	14500	100	14500	100	14500
1/2	A13SK	33	4785	33	4785	33	4785	100	14500	100	14500	100	14500
5/8	A15SK	33	4785	33	4785	33	4785	100	14500	100	14500	100	14500
3/4	A17SK	33	4785	33	4785	33	4785	100	14500	100	14500	100	14500
1	A21SK	30	4350	30	4350	30	4350	80	11600	80	11600	80	11600
1-1/2	A30SK	27	3915	27	3915	27	3915	80	11600	80	11600	70	10150

\*Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

### Temperature range:

Special seals for Skydrol®: -20/+100°C (from -4/+212°F). Please read carefully “Instructions and Warnings” for proper selection of the products.

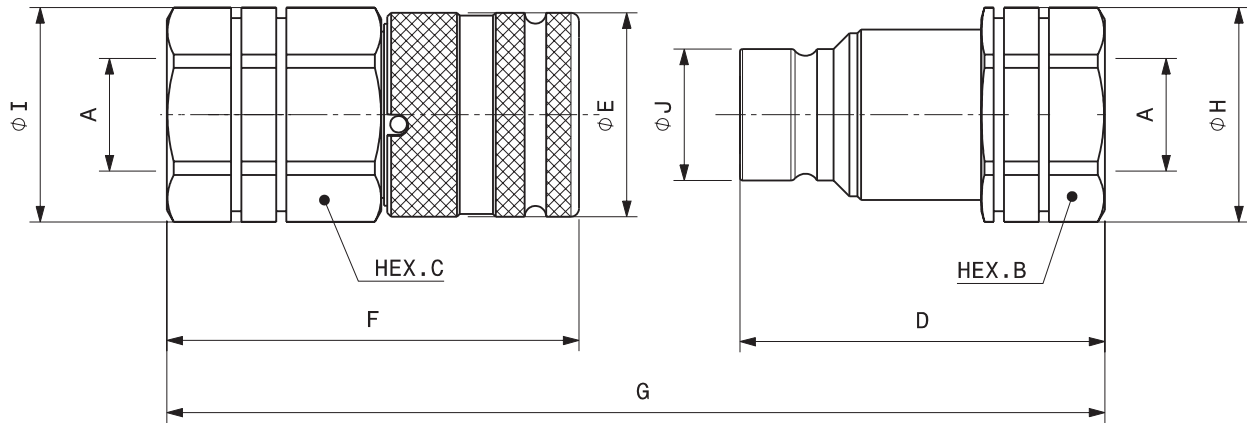
### Tests:

All the performances and the test above are made according to ISO norm test method.

## ⚠ WARNINGS

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.  
 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 and/or pressure in the circuit.  
 Do not couple-uncouple when the temperature inside of the circuit is higher than 80°C (176°F).  
 Do not use on flying aircraft but only for ground equipment&testing.  
 Do not use with mineral or syntetic oil.  
 Check the maximum allowable working pressure of the port in use.  
 Make sure that the medium used is compatible with seal and material as indicated for each series.  
 The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.  
 In case of doubt please contact Stucchi Technical Support.  
**It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website ([www.stucchi.it](http://www.stucchi.it)) before selecting or using Stucchi products.**

## Overall Dimensions



## Port description: FEMALE THREAD BSPP (ISO 1179-1)

Body Size	Descriptive Code	Item code	ISO DN	PORT (A)	Overall Length		Length		Hex		Diameter		Diameter		Weight						
					mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch					
1/4"	F A7SK 1/4 BSP	Female 801300902	6,3	1/4"	G	690,2	23,55	F	53,1	2,09	C	27,0	1,06	I	29,0	1,14	E	28,0	1,10	0,19	0,41
	M A7SK 1/4 BSP	Male 801300903						D	47,9	1,89	B	22,0	0,87	H	23,8	0,94	J	16,1	0,63	0,09	0,19
3/8"	F A9SK 3/8 BSP	Female 801300904	12	3/8"	G	108,8	4,28	F	64,8	2,55	C	30,0	1,18	I	32,0	1,26	E	32,0	1,26	0,27	0,60
	M A9SK 3/8 BSP	Male 801300905						D	60,0	2,36	B	27,0	1,06	H	29,0	1,14	J	19,7	0,78	0,15	0,32
1/2"	F A13SK 1/2 BSP	Female 801300908	12,5	1/2"	G	127,5	5,02	F	76,8	3,02	C	36,0	1,42	I	40,0	1,57	E	38,0	1,50	0,45	1,00
	M A13SK 1/2 BSP	Male 801300909						D	68,0	2,68	B	36,0	1,42	H	40,0	1,57	J	24,5	0,96	0,24	0,52
5/8"	F A15SK 3/4 BSP	Female 801300912	16	3/4"	G	139,4	5,49	F	84,0	3,31	C	41,0	1,61	I	44,8	1,76	E	42,0	1,65	0,63	1,38
	M A15SK 3/4 BSP	Male 801300913						D	73,0	2,87	B	36,0	1,42	H	38,5	1,52	J	27,0	1,06	0,30	0,66
3/4"	F A17SK 1" BSP	Female 801300914	19	1"	G	160,5	6,32	F	98,8	3,89	C	46,0	1,81	I	49,8	1,96	E	48,0	1,89	0,94	2,07
	M A17SK 1" BSP	Male 801300915						D	83,7	3,30	B	46,0	1,81	H	49,8	1,96	J	30,0	1,18	0,48	1,05
1"	F A21SK 1-1/4 BSP	Female 801300916	25	1 1/4"	G	172,8	6,80	F	105,8	4,17	C	55,0	2,17	I	59,8	2,35	E	55,0	2,17	1,31	2,89
	M A21SK 1-1/4 BSP	Male 801300917						D	90,0	3,54	B	55,0	2,17	H	59,8	2,35	J	36,0	1,42	0,71	1,56
1-1/2"	F A30SK 1-1/2 BSP	Female 801300918	-	1 1/2"	G	214,9	8,46	F	132,4	5,21	C	65,0	2,56	I	82,0	3,23	E	80,0	3,15	3,14	6,92
	M A30SK 1-1/2 BSP	Male 801300919						D	111,1	4,37	B	65,0	2,56	H	69,8	2,75	J	57,0	2,24	1,67	3,67

### Panel mounting

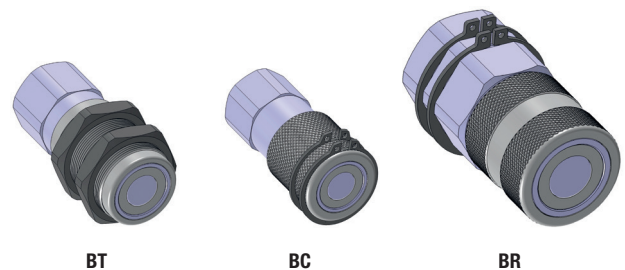
A-SK Series is available upon request also as panel mounting version.

**BT: Lock Ring Solution**  
Thread on the male body and female body.

**BC: Snap Ring Solution**  
Grooves on the male body and on the female sleeve.

**BR: Snap Ring Solution**  
Grooves on the male adaptor and on the female adaptor.

For specific codes, dimensions or any other information, please contact Stucchi Technical Support.



BT

BC

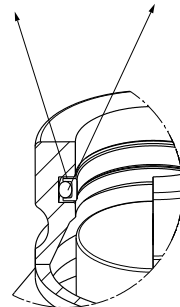
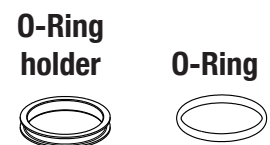
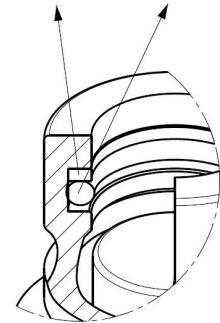
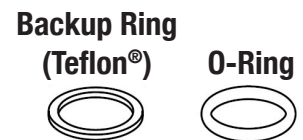
BR



## Spare kit seal for Male

Repair kit / OR+BK		
Body Size	Description	Part Number
1/4"	M A7SK	815701235
3/8"	M A9SK	815701237
1/2"	M A13SK	815701239
5/8"	M A15SK	815700869
3/4"	M A17SK*	815700871
1"	M A21SK*	815700875
1 1/2"	M A30SK*	815700873

\* Kit replacement O-Ring Holder + O-Ring  
O-Ring in special compound  
BackUp in Teflon®



# VP-SK Series

SPECIAL SERIES



## Technical specifications and options

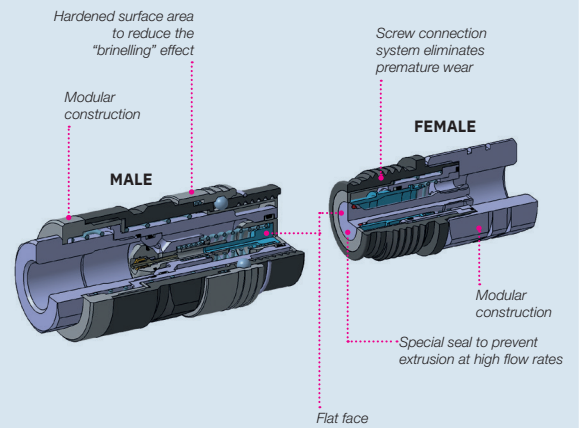
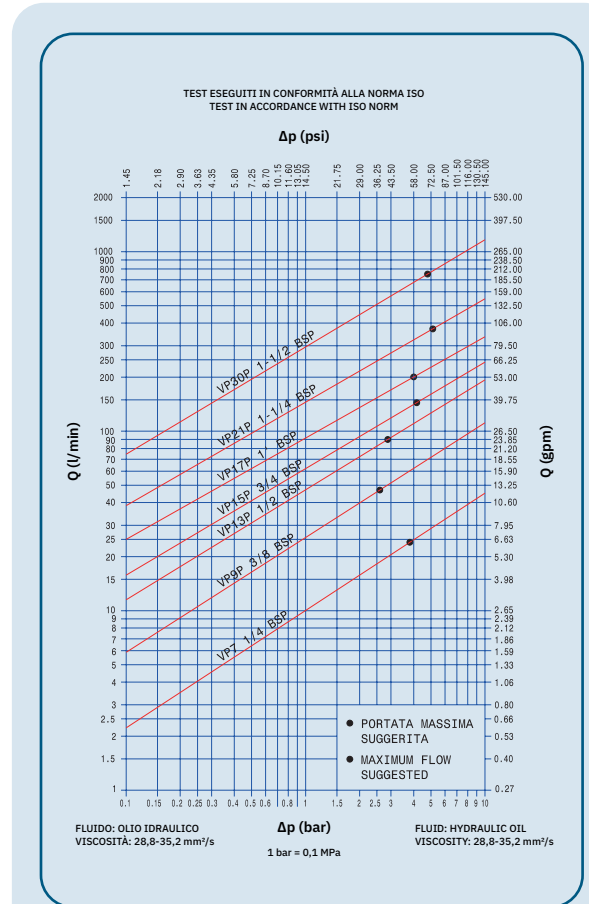
<b>Interchange</b> Stucchi profile	<b>Sealing description</b> Special seal for Skydrol®	<b>Connection system</b> Screw
<b>Available sizes</b> from 5/8" to 1"	<b>Material /treatment</b> Carbon steel /Cr3+QPQ	<b>Available threads</b> BSP
<b>Operating pressure</b> Up to 550 bar	<b>Locking mechanism</b> Screw to connect + Safety sleeve	<b>Flow rate</b> Up to 378 L/Min
<b>Temperature</b> -20° / +100°	<b>Valving style</b> Flat face	<b>Connection under pressure</b> Connection: not allowed Disconnection: not allowed

## Benefits

- Ideal solution for ground equipment and test bench to be used in the aircraft industry.
- Special seals compatible with **Skydrol® 500B-4**, **Skydrol® LD-4** and **Skydrol® 5** to be used on test bench and ground equipment.
- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Minimal fluid spillage during disconnection, reducing fluid spillage to the environment.
- Minimal air inclusion during connection.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- The safety sleeve integrated in the connection system prevents the accidental disconnection.
- The modular design allows flexibility with a wide range of configurations.
- High resistance to pressure impulses.
- Safe and simple to use.

## How to use

- Before connecting, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect, push the female coupling to the male coupling, push the male and twist in one motion to catch the first thread on the female half and continue to thread together (do not push together couplers, screw only).
- The screwing of the threads should be done by hand without the use of the tools for the first part of the connection.
- Always connect male and female with the male adaptor fixed on the hose (male adaptor should not rotate during connection).
- Thread the mating halves until the sleeve lock clicks into position. This activates the safety lock and eliminates accidental disconnection of the coupling.
- To disconnect push the safety locking sleeve towards the male coupling and unthread the connection.
- The lock is disengaged after one complete rotation of the coupler, continue to unthread until both halves disconnect.
- If safety lock sleeve will not push back rotate the male coupling to couple direction until the sleeve will pull back.



## MAIN APPLICATIONS



## Performances

Size	Series/Size	Max. flow suggested		Connect torque		Disconnect torque		Spillage*
		l/min	GPM	Nm	lbf ft	Nm	lbf ft	
5/8	VP15SK	148	39,22	1,1	0,81	1,0	0,74	0,03
3/4	VP17SK	200	53,00	2,0	1,47	1,4	1,03	0,01
1	VP21SK	378	100,17	2,2	1,62	1,8	1,33	0,06

Size	Series/Size	Max. operating pressure						Burst pressure					
		Coupled		Male		Female		Coupled		Male		Female	
		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
5/8	VP15SK	55	7975	55	7975	33	4785	140	20300	140	20300	100	14500
3/4	VP17SK	50	7250	50	7250	33	4785	125	18125	125	18125	100	14500
1	VP21SK	47	6815	47	6815	30	4350	120	17400	120	17400	80	11600

\*Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

### Temperature range:

Special seals for Skydrol®: -20/+100°C (from -4/+212°F). Please read carefully “Instructions and Warnings” for proper selection of the products.

### Tests:

All the performances and the test above are made according to ISO norm test method.

## ⚠ WARNINGS

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

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).

Check the maximum allowable working pressure of the port in use.

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.

Do not use on flying aircraft but only for ground equipment&testing.

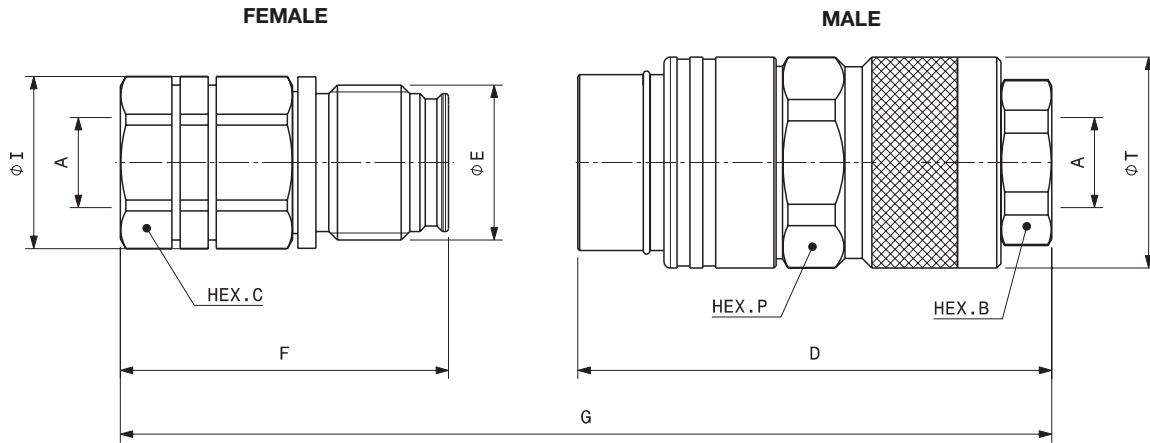
Do not use with mineral or syntetic oil.

In case of doubt please contact Stucchi Technical Support.

**It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website ([www.stucchi.it](http://www.stucchi.it)) before selecting or using Stucchi products.**



## Overall Dimensions



## Port description: FEMALE THREAD BSPP (ISO 1179-1)

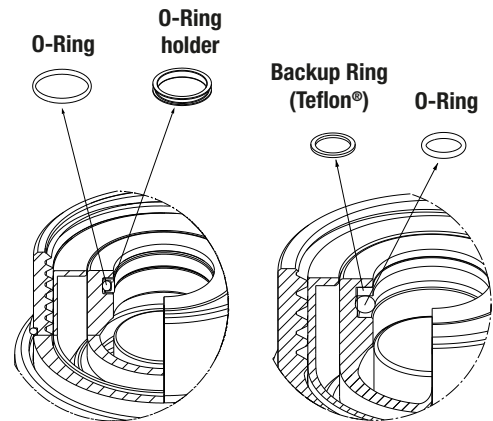
Body Size	Descriptive Code	Item code	PORT (A)	E	Overall Length	Length		Hex		Hex		Diameter		Weight				
						mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch			
5/8"	F VP15SK 3/4 BSP	Female 807300910	3/4"	M39x3	G	174,9	6,89	F	83,4	3,28	C	41,0	1,61	I	44,8	1,76	0,58	1,28
	M VP15SK 3/4 BSP	Male 807300911						D	110,0	4,33	B	36,0	1,42	P	48,0	1,89	T	52,0
3/4"	F VP17SK 1" BSP	Female 807300902	1"	M45x3	G	202,5	7,97	F	98,0	3,86	C	46,0	1,81	I	49,8	1,96	0,91	2,00
	M VP17SK 1" BSP	Male 807300903						D	127,1	5,00	B	46,0	1,81	P	55,0	2,17	T	60,0
1"	F VP21SK 1-1/4 BSP	Female 807300904	1-1/4"	M55x3	G	214,8	8,46	F	105,0	4,13	C	55,0	2,17	I	59,8	2,35	1,40	3,08
	M VP21SK 1-1/4 BSP	Male 807300905						D	137,0	5,39	B	55,0	2,17	P	70,0	2,76	T	76,0



### Spare kit seal for Male

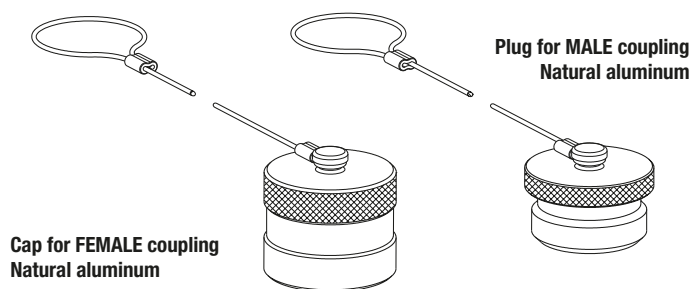
Repair kit / OR+BK		
Body Size	Description	Part Number
5/8"	VP15SK	815700869
3/4"	VP17SK*	815700871
1"	VP21SK*	815700875

\* Kit replacement O-Ring Holder + O-Ring  
O-Ring in special compound  
BackUp in Teflon®



### Protective caps for VP-P Series

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. For the VP-SK series aluminum screw caps complete with lanyard are available (standard color: natural aluminum, other colors available upon request).



Body Size/Description		Protective Cap		
		Part Number		Material/Color
		Cap for Female	Plug for Male	
1/4"	VP7SK	815305050	815305051	Aluminum/Natural
3/8"	VP9SK	815305052	815305053	Aluminum/Natural
1/2"	VP13SK	815305054	815305055	Aluminum/Natural
5/8"	VP15SK	815305056	815305057	Aluminum/Natural
3/4"	VP17SK	815305058	815305059	Aluminum/Natural
1"	VP21SK	815305060	815305061	Aluminum/Natural
1-1/2"	VP30SK	815305062	815305063	Aluminum/Natural

# VEP-SK Series

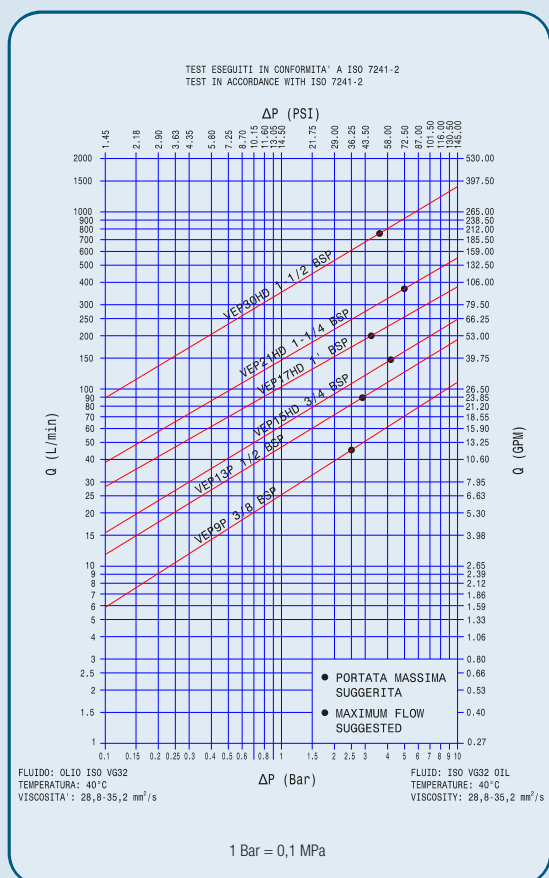
SPECIAL SERIES



Easy CUP

## Technical specifications and options

- Interchange**  
Stucchi VEP profile
- Sealing description**  
Special seal
- Connection system**  
Screw
- Available sizes**  
from 3/8" to 1-1/2"
- Material /treatment**  
Carbon steel/QPQ
- Available threads**  
BSP - NPT - SAE
- Operating pressure**  
Up to 550 bar
- Locking mechanism**  
Screw to connect
- Flow rate**  
Up to 750 L/Min
- Temperature**  
-20° / +100°
- Valving style**  
Flat face
- Connection under pressure**  
Connection: not allowed  
Disconnection: not allowed

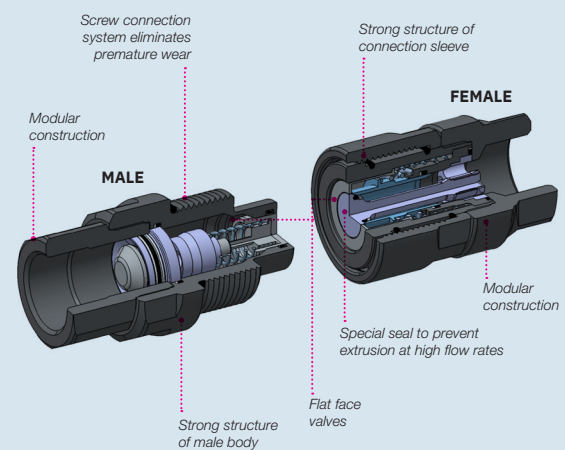


## Benefits

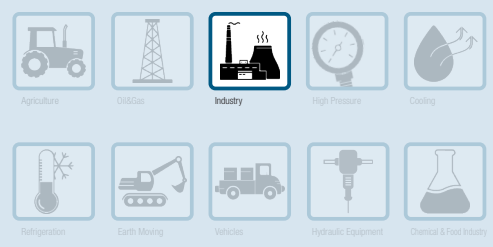
- Ideal solution for ground equipment and test bench to be used in the aircraft industry.
- Special seals compatible with **Skydrol® 500B-4**, **Skydrol® LD-4** and **Skydrol® 5** to be used on test bench and ground equipment.
- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Minimal fluid spillage during disconnection, reducing fluid spillage to the environment.
- Minimal air inclusion during connection.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- Internal pressure release valve system allows an easy connection with high internal residual pressure.
- The modular design allows flexibility with a wide range of configurations.
- High resistance to pressure impulses.
- Safe and simple to use.
- Dimension 3/8" (VEP9SK) and 1/2" (VEP13SK) it is available with the "P" not "HD" design.

## How to use

- Before connecting, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect pull forward the connection sleeve of the female coupling.
- Align the female and male coupling holding forward the connection sleeve and thread together turning the sleeve.
- Keep couplers aligned during connection process. Do not push to connect couplings.
- The screwing of the threads should be done by hand without the use of the tools for the first part of the connection.
- Screw the connecting sleeve of the female until metal surface contact with the male coupling is complete.
- Tighten the sleeve to the base of the male using the tightening torque spec. as indicated in table on page 18.
- To disconnect turn sleeve from contact position using a wrench, then unscrew making sure the couplings stay aligned through the entire process.



## MAIN APPLICATIONS



## Performances

Size	Series/Size	Max. flow suggested		Connect torque		Disconnect torque		Spillage*
		l/min	GPM	Nm	lbf ft	Nm	lbf ft	
3/8	VEP9SK	46	12,19	2,2	1,62	1,4	1,03	0,04
1/2	VEP13SK	90	23,85	1,8	1,33	1,4	1,03	0,02
5/8	VEP15SK	148	39,22	3,0	2,21	1,8	1,33	0,03
3/4	VEP17SK	200	53,00	5,6	4,13	3,6	2,65	0,02
1	VEP21SK	378	100,17	8,2	6,04	5,8	4,27	0,06
1-1/2	VEP30SK	750	198,75	26,0	19,16	12,5	9,21	0,20

Size	Series/Size	Max. operating pressure						Burst pressure					
		Coupled		Male		Female		Coupled		Male		Female	
Inch		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
3/8	VEP9SK	55	7975	55	7975	33	4785	140	20300	140	20300	100	14500
1/2	VEP13SK	55	7975	55	7975	33	4785	140	20300	140	20300	100	14500
5/8	VEP15SK	55	7975	55	7975	33	4785	140	20300	140	20300	100	14500
3/4	VEP17SK	50	7250	50	7250	33	4785	125	18130	125	18130	100	14500
1	VEP21SK	47	6815	47	6815	30	4350	120	17400	120	17400	80	11600
1-1/2	VEP30SK	40	5800	40	5800	27	3915	110	15950	110	15950	80	11600

Size	Series/Size	Tightening torque	
		Nm	lbf ft
3/8	VEP9SK	50-60	37-44
1/2	VEP13SK	65-75	48-55
5/8	VEP15SK	70-80	52-59
3/4	VEP17SK	110-130	81-96
1	VEP21SK	125-145	92-107
1-1/2	VEP30SK	155-175	114-129

\*Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

### Temperature range:

Special seals for Skydrol®: -20/+100°C (from -4/+212°F). Please read carefully "Instructions and Warnings" for proper selection of the products.

### Tests:

All the performances and the test above are made according to ISO norm test method.

## ⚠ WARNINGS

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

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).

Check the maximum allowable working pressure of the port in use.

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.

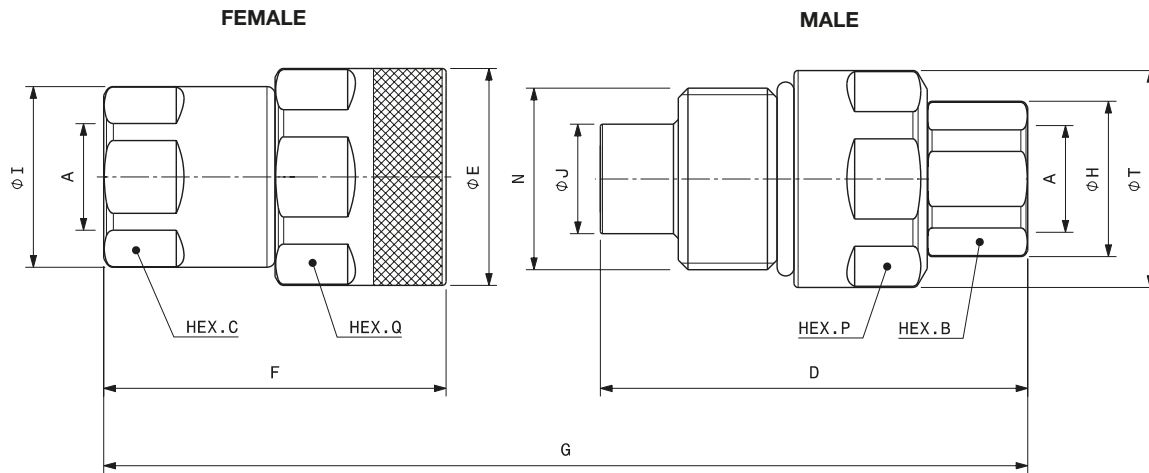
Do not use on flying aircraft but only for ground equipment&testing.

Do not use with mineral or syntetic oil.

In case of doubt please contact Stucchi Technical Support.

**It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website ([www.stucchi.it](http://www.stucchi.it)) before selecting or using Stucchi products.**

## Overall Dimensions



### Port description: FEMALE THREAD BSP (ISO 1179-1)

Body Size	Descriptive Code	Item code	PORT (A)	E	Overall Length	Length		Hex		Hex		Diameter		Weight							
						mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch						
1"	F VEP21HDSK 1-1/4 BSP	Female 808100914	1-1/4"	M58x3	G	216,2	8,51	F	106,8	4,20	C	55,0	2,17	Q	65,0	2,56	E	69,8	2,75	2,02	4,45
	M VEP21HDSK 1-1/4 BSP	Male 808100915						D	133,4	5,25	B	55,0	2,17	P	65,0	2,56	T	69,8	2,75	1,79	3,95

### Port description: FEMALE THREAD NPT (ANSI B.1.20.1)

Body Size	Descriptive Code	Item code	PORT (A)	N	Overall Length	Length		Hex		Hex		Diameter		Weight							
						mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch				
5/8"	F VEP15HDSK 3/4 NPT	Female 808101910	3/4"	M45x3	G	172,4	6,79	F	84,9	3,34	C	41,0	1,61	Q	50,0	1,97	E	53,8	2,12	0,93	2,05
	M VEP15HDSK 3/4 NPT	Male 808101911						D	106	4,17	B	36,0	1,42	P	50,0	1,97	T	53,8	2,12	0,95	2,09
3/4"	F VEP17HDSK 1" NPT	Female 808101912	1"	M50x3	G	200,9	7,91	F	99,7	3,93	C	46,0	1,81	Q	55,0	2,17	E	58,8	2,31	1,28	2,82
	M VEP17HDSK 1" NPT	Male 808101913						D	124,0	4,88	B	46,0	1,81	P	55,0	2,17	T	58,8	2,31	1,30	2,87
1"	F VEP21HDSK 1-1/4 NPT	Female 808101915	1-1/4"	M58x3	G	216,2	8,51	F	133,4	5,25	C	55,0	2,17	P	65,0	2,56	T	69,8	2,75	1,79	3,95
	M VEP21HDSK 1-1/4 NPT	Male 808101915						D	133,4	5,25	B	55,0	2,17	P	65,0	2,56	T	69,8	2,75	1,79	3,95
1-1/2"	F VEP30HDSK 1-1/2 NPT	Female 808101917	1"	M80x4	G	253,9	10,00	F	150,0	5,91	C	65,0	2,56	P	75,0	2,95	T	94,4	3,72	3,30	7,28
	M VEP30HDSK 1-1/2 NPT	Male 808101917						D	150,0	5,91	B	65,0	2,56	P	75,0	2,95	T	94,4	3,72	3,30	7,28

### Port description: FEMALE THREAD NPT (ANSI B.1.20.1)

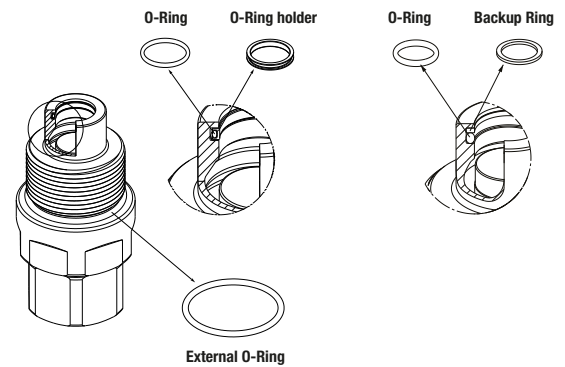
Body Size	Descriptive Code	Item code	PORT (A)	N	Overall Length	Length		Hex		Hex		Diameter		Weight							
						mm	Inch	mm	Inch	mm	Inch	mm	Inch	Kg	Lbs						
3/8"	F VEP9SK 3/8 SAE	Female 807204900	"9/16-18UNF"	M33x2	G	132,5	5,22	F	65,8	2,59	C	30,0	1,18	Q	38,0	1,50	E	41,8	1,65	0,37	0,81
	M VEP9SK 3/8 SAE	Male 807204901						D	83,7	3,30	B	27,0	1,06	T	37,8	1,49	0,35	0,76			
1/2"	F VEP13SK 1/2 SAE	Female 807204906	"3/4-16UNF"	M40x3	G	160,1	6,30	F	77,8	3,06	C	36,0	1,42	Q	46,0	1,81	E	49,8	1,96	0,63	1,39
	M VEP13SK 1/2 SAE	Male 807204907						D	100,5	3,96	B	36,0	1,42	T	45,8	1,80	0,67	1,48			
5/8"	F VEP15HDSK 3/4 SAE	Female 808104910	1-1/16-12UN	M45x3	G	172,4	6,79	F	84,9	3,34	C	41,0	1,61	Q	50,0	1,97	E	53,8	2,12	0,91	2,01
	M VEP15HDSK 3/4 SAE	Male 808104911						D	106	4,17	B	41,0	1,61	P	50,0	1,97	T	53,8	2,12	1,0	2,20
1-1/2"	F VEP17HDSK 1 SAE	Female 808104912	1-5/16-12UN	M50x3	G	201,9	7,95	F	100,7	3,96	C	46,0	1,81	Q	55,0	2,17	E	58,8	2,31	1,27	2,80
	M VEP17HDSK 1 SAE	Male 808104913						D	124,0	4,88	B	46,0	1,81	P	55,0	2,17	T	58,8	2,31	1,29	2,84
3/4"	F VEP21HDSK 1-1/4 SAE	Female 808104914	1-5/8-12UN	M58x3	G	216,2	8,51	F	106,8	4,20	C	55,0	2,17	Q	65,0	2,56	E	69,8	2,75	2,01	4,43
	M VEP21HDSK 1-1/4 SAE	Male 808104915						D	133,4	5,25	B	55,0	2,17	P	65,0	2,56	T	69,8	2,75	1,78	3,92
1"	F VEP30HDSK 1-1/2 SAE	Female 808104916	1-7/8-12UN	M80x4	G	253,9	10,00	F	133,5	5,26	C	65,0	2,56	Q	85,0	3,35	E	95,0	3,74	4,34	9,56
	M VEP30HDSK 1-1/2 SAE	Male 808104917						D	150,0	5,91	B	65,0	2,56	P	75,0	2,95	T	94,4	3,72	3,28	7,23



## Spare kit seal

Repair kit / OR+BK+EXTERNAL OR		
Body Size	Description	Part Number
3/8"	M VEP9SK	815701241
1/2"	M VEP13SK	815701243
5/8"	M VEP15SK	815701245
3/4"	M VEP17SK*	815701247
1"	M VEP21SK*	815701249
1-1/2"	M VEP30SK*	815701251

\* Kit replacement O-Ring Holder + O-Ring + External O-Ring O-Ring in special compound



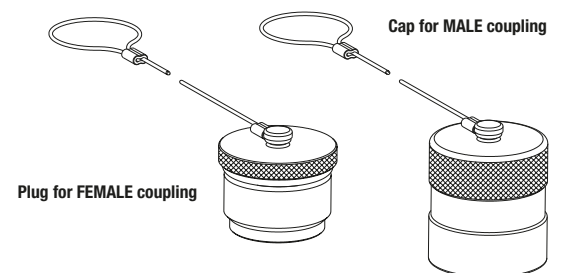
## Protective caps for VEP-HD Series

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life.

Two solutions are available:

- threaded aluminum caps with lanyard (standard color: natural aluminum, other colors available upon request)
- threaded plastic caps with lanyard (standard color black).

Body Size/Description		Protective Cap			Material/Color
		Part Number		Material/Color	
		Plug for Female	Cap for Male		
5/8"	VEP15SK	815305076	815305077	Aluminum/Natural	
3/4"	VEP17SK	815305078	815305079	Aluminum/Natural	
1"	VEP21SK	815305080	815305081	Aluminum/Natural	
1-1/2"	VEP30SK	815305082	815305083	Aluminum/Natural	



Body Size/Description		Protective Cap			Material/Color
		Part Number		Material/Color	
		Plug for Female	Cap for Male		
5/8"	VEP15SK	815303130	815303131	Plastic/Black	
3/4"	VEP17SK	815303132	815303133	Plastic/Black	
1"	VEP21SK	815303134	815303135	Plastic/Black	
1-1/2"	VEP30SK	815303136	815303137	Plastic/Black	