

## SPH/BA Motorsports

Clean-break  
couplings for high  
pressure circuits





## Applications

- shock absorbers, brake and hydraulic lines
- lubrication and coolants

## Choose SPH/BA couplings...

**Combine lightweight and resistance, ally performance and safety.**

### Staunch resistance

Even subjected to extreme vibrations, the connections are perfectly safe thanks to the bayonet locking system.

Easy to identify thanks to their blue or green color, the titanium versions are particularly strong.

### bayonet locking



### titanium



### aluminium



### Lightness

In red or yellow aluminium and from only 23 g, the SPH/BA range includes a «featherweight» version.







[www.staubli-motorsport.com](http://www.staubli-motorsport.com)

**...and spend more time on the track!**

**Non-drip, clean break,  
to guarantee the integrity  
of the fluids and the  
environment.**

The flush face design ensures no air inclusion into the system when connecting as well as no leakage when disconnecting.

This eliminates the need to purge the system and permits the use of pre-filled hoses.

**Complete range**

- 5 diameters
- 2 constructions and seal types according to your fluids and applications
- 4 colours for an easy identification of your circuits.

**Optimal flow**

The internal valve design ensures maximum flow within the minimum outside diameter.

**Quick and easy**

Just push and twist to make a secure connection.



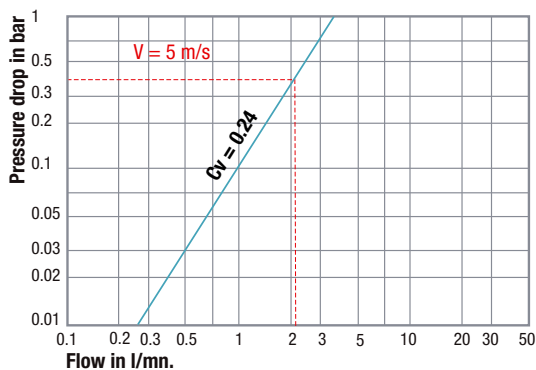


## Technical characteristics

	SPH 03/BA		SPH 05/BA	
Flow diameter (mm)	03		05	
Cross section (mm <sup>2</sup> )	7.1		19.6	
Shut-off system	Double		Double	
Max. operating pressure (bar)	aluminium	titanium	aluminium	titanium
	200	350	160	220

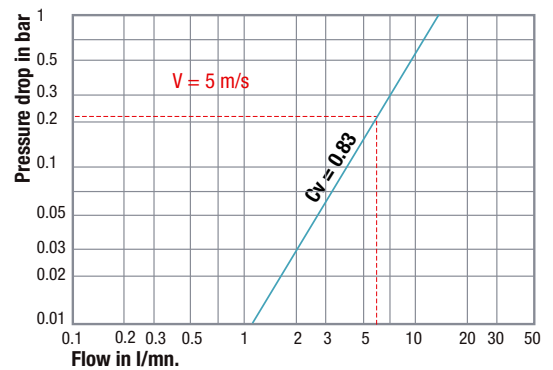
## Hydraulic charts flow rate / pressure drop

SPH 03/BA



SPH 03.1652/BA/L/JV → SPH 03.7652/BA/L/JV

SPH 05/BA



SPH 05.1655/BA/L/JV → SPH 05.7655/BA/L/JV

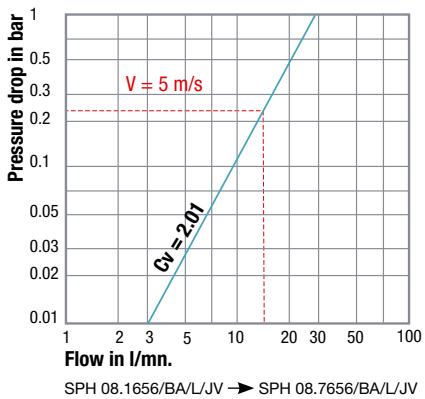
## Construction

	2 constructions				2 types of seals		
	High strength aluminium code L		Main parts in titanium code TI		For brake fluid	<b>Ethylene propylene (EPDM)</b>	Add <b>/JE</b> at the end of the part number
available colors					For oils, mineral greases, nitrogen, gasoline...	<b>Fluorocarbon (FPM)</b>	Add <b>/JV</b> at the end of the part number

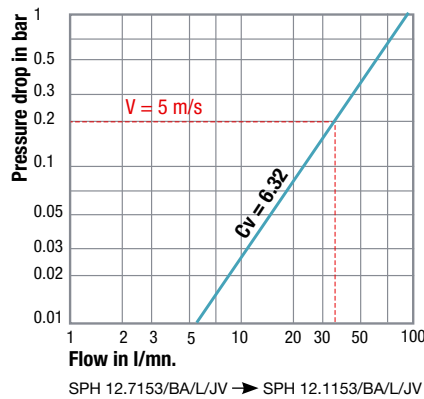


SPH 08/BA	SPH 12/BA	SPH 16/BA
08	12	16
50.3	113	201.0
Double	Double	Double
aluminium	aluminium	aluminium
80	50	50

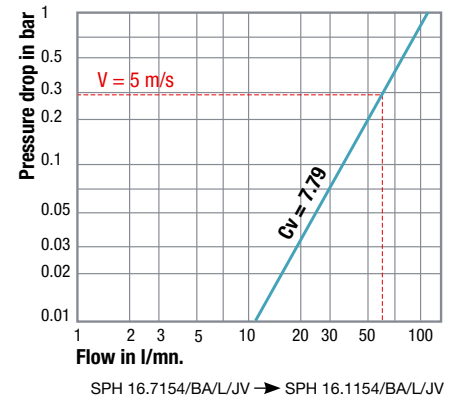
**SPH 08/BA**



**SPH 12/BA**



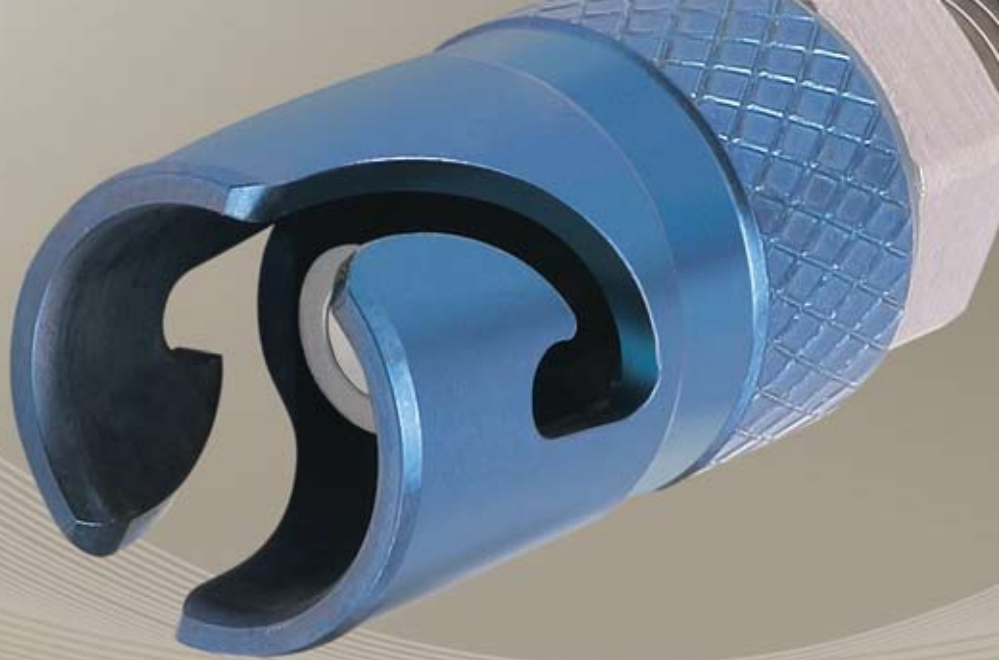
**SPH 16/BA**



**Test conditions**

- Water





Part numbers: SPH 03/BA

	F	L (mm)	Weight (g)		Part-numbers	
			alu	tit	aluminium	titanium
<b>Socket, metric male thread</b> 	M 10 x 1,0	8	11	16	<span style="color: red;">■</span> SPH 03.1410/BA/L/KR	<span style="color: blue;">■</span> SPH 03.1410/BA/TI/KB
<span style="color: yellow;">■</span> SPH 03.1410/BA/L/KJ					<span style="color: green;">■</span> SPH 03.1410/BA/TI/KV	
<b>Socket, UNF male thread</b> 	<b>UNF 3/8 – 24" JIC DASH 3</b>	12	11	16	<span style="color: red;">■</span> SPH 03.1652/BA/L/KR	<span style="color: blue;">■</span> SPH 03.1652/BA/TI/KB
	<b>UNF 7/16 – 20" JIC DASH 4</b>	14	12	18	<span style="color: red;">■</span> SPH 03.1653/BA/L/KR	<span style="color: blue;">■</span> SPH 03.1653/BA/TI/KB
<b>Panel mounted socket, UNF male thread</b> 	<b>UNF 3/8 – 24" JIC DASH 3</b>	24	14	29	<span style="color: red;">■</span> SPH 03.2652/BA/L/KR	<span style="color: blue;">■</span> SPH 03.2652/BA/TI/KB
					<span style="color: yellow;">■</span> SPH 03.2652/BA/L/KJ	<span style="color: green;">■</span> SPH 03.2652/BA/TI/KV
<b>Socket, Banjo connection</b> 	<b>Banjo Connection</b>	22	14,2	<span style="color: red;">■</span> SPH 03.1021/BA/L/KR/BJ		
				<span style="color: yellow;">■</span> SPH 03.1021/BA/L/KJ/BJ		

\*socket/plug in connected position



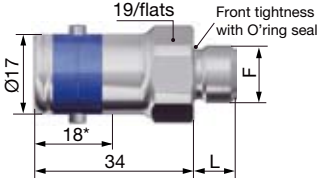




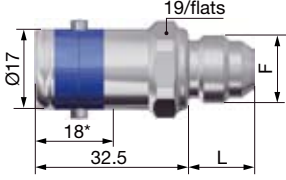








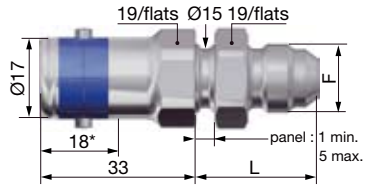








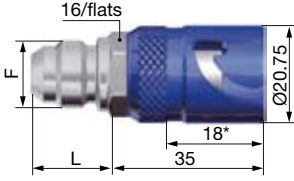








	F	L (mm)	Weight (g)		Part-numbers	
			alu	tit	aluminium	titanium
<b>Plug, metric male thread</b> 	M 10 x 1,0	8	12	-	■ SPH 03.7410/BA/L/KR	-
					■ SPH 03.7410/BA/L/KJ	
<b>Plug, UNF male thread</b> 	UNF 3/8 - 24" JIC DASH 3	12	12	18	■ SPH 03.7652/BA/L/KR	■ SPH 03.7652/BA/TI/KB
					■ SPH 03.7652/BA/L/KJ	■ SPH 03.7652/BA/TI/KV
	UNF 7/16 - 20" JIC DASH 4	14	12	29	■ SPH 03.7653/BA/L/KR	■ SPH 03.7653/BA/TI/KB
					■ SPH 03.7653/BA/L/KJ	■ SPH 03.7653/BA/TI/KV

\*socket/plug in connected position

**Part numbers construction:**

with EPDM seals, add /JE at the end of the part numbers  
 with FPM seals, add /JV at the end of the part numbers

Part numbers: SPH 05/BA

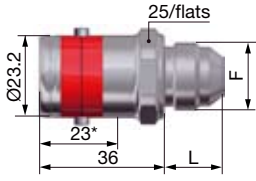
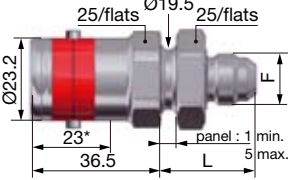
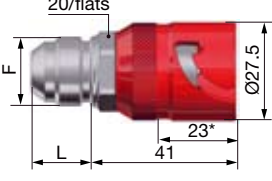
	F	L (mm)	Weight (g)		Part-numbers	
			alu	tit	aluminium	titanium
<b>Socket, metric male thread</b>  	<b>M 12 x 1,0</b>	9	-	28	 SPH 05.1412/BA/L/KR	 SPH 05.1412/BA/TI/KB
					 SPH 05.1412/BA/L/KJ	 SPH 05.1412/BA/TI/KV
<b>Socket, UNF male thread</b>  	<b>UNF 7/16 – 20° JIC DASH 4</b>	14	18	29	 SPH 05.1653/BA/L/KR	 SPH 05.1653/BA/TI/KB
					 SPH 05.1653/BA/L/KJ	 SPH 05.1653/BA/TI/KV
	<b>UNF 9/16 – 18° JIC DASH 6</b>	14	19	27	 SPH 05.1655/BA/L/KR	 SPH 05.1655/BA/TI/KB
					 SPH 05.1655/BA/L/KJ	 SPH 05.1655/BA/TI/KV
<b>Panel mounted socket, UNF male thread</b>  	<b>UNF 7/16 – 20° JIC DASH 4</b>	26	23	36	 SPH 05.2653/BA/L/KR	 SPH 05.2653/BA/TI/KB
					 SPH 05.2653/BA/L/KJ	 SPH 05.2653/BA/TI/KV
	<b>UNF 9/16 – 18° JIC DASH 6</b>	26	24	38	 SPH 05.2655/BA/L/KR	 SPH 05.2655/BA/TI/KB
					 SPH 05.2655/BA/L/KJ	 SPH 05.2655/BA/TI/KV
<b>Plug, UNF male thread</b>  	<b>UNF 7/16 – 20° JIC DASH 4</b>	14	17	26	 SPH 05.7653/BA/L/KR	 SPH 05.7653/BA/TI/KB
					 SPH 05.7653/BA/L/KJ	 SPH 05.7653/BA/TI/KV
	<b>UNF 9/16 – 18° JIC DASH 6</b>	14	19	28	 SPH 05.7655/BA/L/KR	 SPH 05.7655/BA/TI/KB
					 SPH 05.7655/BA/L/KJ	 SPH 05.7655/BA/TI/KV

\*socket/plug in connected position





## Part numbers: SPH 08/BA

	F	L (mm)	Weight (g)	Part-numbers
				aluminium
<b>Socket, UNF male thread</b> 	<b>UNF 9/16 – 18° JIC DASH 6</b>	14	32	<span style="color: red;">■</span> SPH 08.1655/BA/L/KR <span style="color: yellow;">■</span> SPH 08.1655/BA/L/KJ
	<b>UNF 3/4 – 16° JIC DASH 8</b>	16.5	36	<span style="color: red;">■</span> SPH 08.1656/BA/L/KR <span style="color: yellow;">■</span> SPH 08.1656/BA/L/KJ
<b>Panel mounted socket, UNF male thread</b> 	<b>UNF 9/16 – 18° JIC DASH 6</b>	27	43	<span style="color: red;">■</span> SPH 08.2655/BA/L/KR <span style="color: yellow;">■</span> SPH 08.2655/BA/L/KJ
	<b>UNF 3/4 – 16° JIC DASH 8</b>	30	46	<span style="color: red;">■</span> SPH 08.2656/BA/L/KR <span style="color: yellow;">■</span> SPH 08.2656/BA/L/KJ
<b>Plug, UNF male thread</b> 	<b>UNF 9/16 – 18° JIC DASH 6</b>	14	29	<span style="color: red;">■</span> SPH 08.7655/BA/L/KR <span style="color: yellow;">■</span> SPH 08.7655/BA/L/KJ
	<b>UNF 3/4 – 16° JIC DASH 8</b>	16.5	33	<span style="color: red;">■</span> SPH 08.7656/BA/L/KR <span style="color: yellow;">■</span> SPH 08.7656/BA/L/KJ

\*socket/plug in connected position

### Part numbers construction:

with EPDM seals, add /JE at the end of the part numbers  
 with FPM seals, add /JV at the end of the part numbers



Part numbers: SPH 12/BA

	F	L (mm)	L1 (mm)	Weight (g)	Part-numbers aluminium
<b>Socket, male thread</b> 	G 1/2	14	55.9	105	■ SPH 12.1153/BA/L/KJ
<b>Socket, UNF male thread</b> 	UNF 7/8 - 14" JIC DASH 10	19.3	55.9	108	■ SPH 12.1657/BA/L/KJ
	UNF 1 1/16" - 12" JIC DASH 12	22	53.9	111	■ SPH 12.1658/BA/L/KJ
<b>Plug, male thread</b> 	G 1/2	14	72.9	91	■ SPH 12.7153/BA/L/KJ
<b>Plug, UNF male thread</b> 	UNF 7/8 - 14" JIC DASH 10	19.3	72.9	95	■ SPH 12.7657/BA/L/KJ
	UNF 1 1/16" JIC - DASH 12	22	66.9	95	■ SPH 12.7658/BA/L/KJ

\*socket/plug in connected position



## Part numbers: SPH 16/BA

	F	L (mm)	Weight (g)	Part-numbers
				aluminium
<b>Socket, male thread</b> 	<b>G 3/4</b>	16	167	■ SPH 16.1154/BA/L/KJ
<b>Socket, UNF male thread</b> 	<b>UNF 1 1/16 – 12" JIC DASH 12</b>	22	170	■ SPH 16.1658/BA/L/KJ
<b>Plug, male thread</b> 	<b>G 3/4</b>	16	160	■ SPH 16.7154/BA/L/KJ
<b>Plug, UNF male thread</b> 	<b>UNF 1 1/16 – 12" JIC DASH 12</b>	22	163	■ SPH 16.7658/BA/L/KJ

\*socket/plug in connected position  
For other threads, please consult Stäubli

### Part numbers construction:

with EPDM seals, add /JE at the end of the part numbers  
with FPM seals, add /JV at the end of the part numbers

We reserve the right to modify product specifications without prior notice.



**Brazil**

Tel.: +55 (0) 11 2348 7400  
connectors.br@staubli.com

**North America**

(USA, Canada, Mexico)  
Tel.: +1 864/433-1980  
connectors.usa@staubli.com

**Belgium**

Tel.: +32 (0) 56 36 40 03  
connectors.be@staubli.com

**Czech Republic,  
Slovakia, Hungary**

Tel.: +420 466 616 125  
connectors.cz@staubli.com

**France**

Tel.: +33 (0)1 69 93 25 00  
srf@staubli.com

**Germany, Austria**

Tel.: +49 (0) 921/883-80  
connectors.de@staubli.com

**Italy**

Tel.: +39 (0) 362/944.1  
connectors.it@staubli.com

**Poland**

Tel.: +48 42 636 85 04  
connectors.pl@staubli.com

**Portugal**

Tel.: +351 22 978 39 56/50  
connectors.pt@staubli.com

**Romania**

Tel.: +40374040494  
connectors.ro@staubli.com

**Russia**

Tel.: + 7 812 3344630  
connectors.ru@staubli.com

**Spain**

Tel.: +34 937 205 405  
connectors.es@staubli.com

**Switzerland**

Tel.: +41 (0) 43/244 22 33  
connectors.ch@staubli.com

**United Kingdom**

Tel.: +44 (0) 1952 671 918  
connectors.uk@staubli.com

**China**

Tel.: +86 571 86912161  
connectors.cn@staubli.com

**Hong Kong**

Tel.: +852-2366 0660  
connectors.hk@staubli.com

**Japan**

Tel.: +81 6 6889 3308  
connectors.stkk@staubli.com

**Singapore**

Tel.: +65 / 6266 0900  
connectors.sg@staubli.com

**South Korea**

Tel.: +82 53 753 0044  
connectors.kr@staubli.com

**Taiwan**

Tel.: +886-2-2568 2744  
connectors.tw@staubli.com

**Turkey**

Tel.: +90 212/472 13 00  
connectors.tr@staubli.com

[www.staubli-motorsport.com](http://www.staubli-motorsport.com)



■ Staubli units  
○ Connectors distributors

**International sales coordination**

Stäubli Faverges - BP 70 - F - 74210 Faverges  
Tel.: +33 (0) 4 50 65 67 97 - Fax: +33 (0) 4 50 65 60 69  
e mail: connectors.sales@staubli.com

Stäubli is a trademark of Stäubli International AG, registered in Switzerland and other countries.

© Stäubli, 10/02/2012

Z 410.02 e B