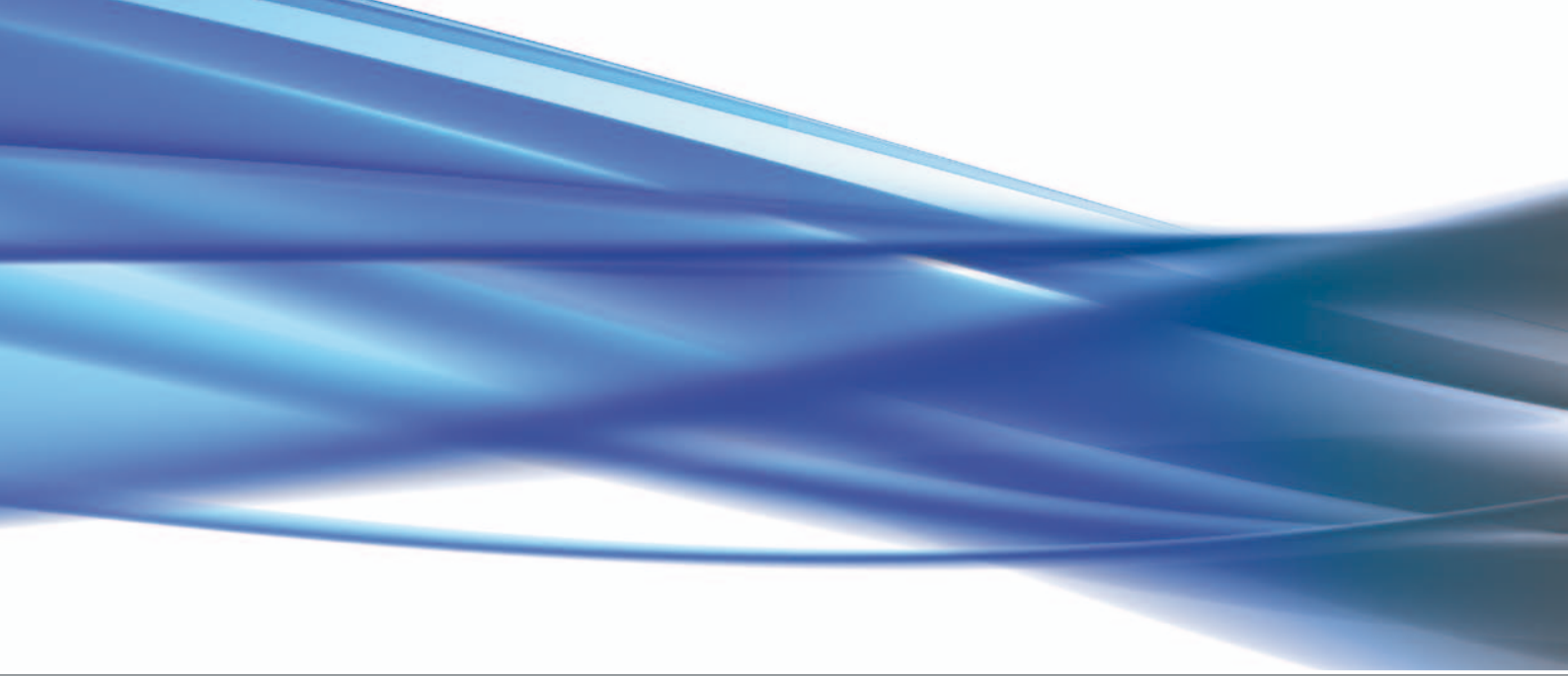


CBX Hydraulics





Anti-pollution technology ...

- mineral or synthetic oil,
- lubricating oil

A wider range

The CBX is now available in **5 nominal bores:** 3, 6, 9, 12 and 16 mm.



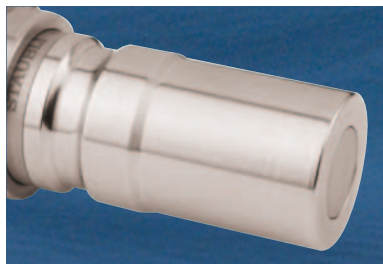
Spill-free to ensure operator safety

- no discharge and no work place contamination,
- protection for tools and production.



Flat faces to guarantee the integrity of fluids

- no pollution enters your circuits.



Excellent mechanical strength

The robust construction with long plug guiding in the socket, in the connected position provides the CBX with great strength to withstand high mechanical stresses (vibrations, oscillations, etc).



... servicing your hydraulic applications

Push; and it's connected

Automatic locking CBXs give you ever easier handling.

A concept that is especially suitable for:

- blind connection,
- repeated connections.

Compact design

Especially suitable for difficult access situations.

Efficiency

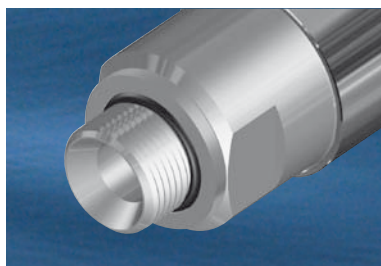
Maximum flow in the smallest size.

Ease of connection

- Front sealing by a seal fitted into the back adapter **on all cylindrical male plugs** (except built-in).

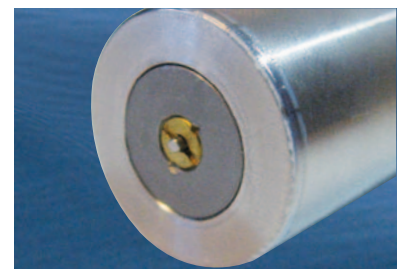


- Sealing by sealing-kit KES ring possible **on all cylindrical BSP thread sockets** (see pages 5, 6 and 7).

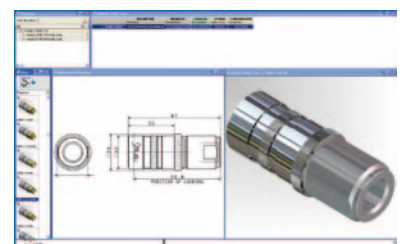


Connection under residual pressure

A central relief valve built into the socket or the plug valve allows for the reduction of the residual pressure in the circuit.



3D-files available on request.





Technical data

	CBX 03	CBX 06	CBX 09	CBX 12	CBX 16
Max. working pressure (bar)	450	180	180	180	180
Bore diameter (mm)	3	6	9	12	16
Shut-off	double				

Working temperatures (without dust cap)

Type of flow	Type of seal	Working temperatures (°C)
Hydraulic and mineral oils	Nitrile (NBR)	- 15 to + 100 °C
	Fluorocarbon (FPM)	- 10 to + 200 °C
Heat transfer oil	Perfluoroelastomer (FFKM)	0 to + 250 °C

Working temperatures for dust caps in Choroprene (CR): - 20 to + 100 °C

For other temperatures, consult us.

Sealing

Seals:

- Nitrile (NBR) as standard
- Fluorocarbon (FPM)
- Perfluoroelastomer (FFKM) in the fluid jet

Other seal material available on request.

Construction

- Stainless steel and brass: CBX 06, CBX 09 and CBX 16
- Stainless steel: CBX 06 and CBX 12
- Stainless steel in the fluid steam: CBX 06 and CBX 09 with BF code

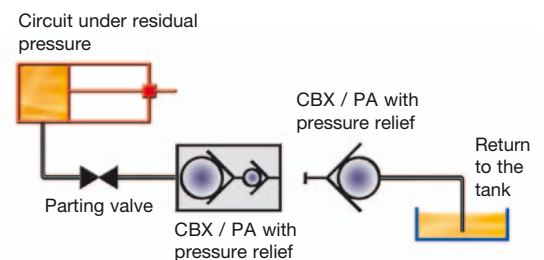
Connection under residual pressure (/PA option)

Option available only on CBX 09, 12 and 16 mm and with /JV seal.

Part-numbers of sockets and plugs with /PA option:

add the /PA code to the part-numbers pages 6 and 7.

Attention: the /PA function is only possible when applied to both the socket **AND** the plug part-numbers.



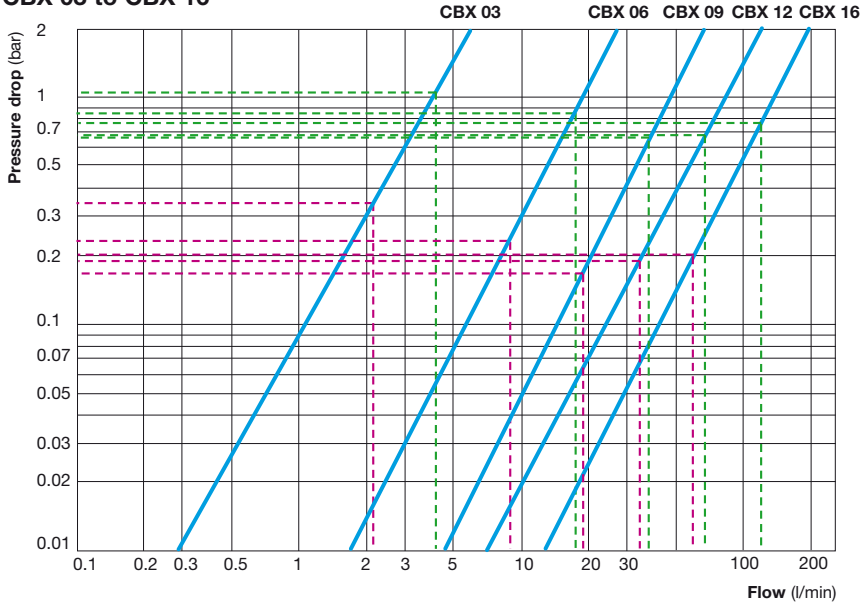
		CBX 09/PA	CBX 12/PA	CBX 16/PA
Max. working pressure (bar)		180	180	180
Max. residual pressure for connection under pressure (bar)	Socket	40	60	40
	Plug	150	150	150

Hydraulic flow rate / pressure drop charts

Speed (m/s)	Flow (l/min)				
	CBX 03	CBX 06	CBX 09	CBX 12	CBX 16
5 - - -	2	8.5	19	34	60.5
10 - - -	4	17	38	68	121

- - - Speed of flow less than or equal to 5 m/s: all seals
- - - Speed of flow between 5 and 10 m/s:
 - Nitrile and Fluorocarbon seals
 - temperatures ≤ 60 °C

CBX 03 to CBX 16



Test conditions:

- Fluid: water
- Direction of flow: plug → socket

	CBX 03	CBX 06	CBX 09	CBX 12	CBX 16
Cv	0.27	1.28	3.29	5.77	9.73

Options

Sealing

Fluorocarbon (FPM) and Perfluoroelastomer (FFKM) seals are available on all models.

Add the corresponding code to the socket and plug part-numbers:

JV: Fluorocarbon seals

JKV: Perfluoroelastomer seals (in the fluid jet)

Ex.: CBX 09.1102/JV

(no code: Nitrile seals)

KES sealing-kit



KES sealing kits consist of a retaining ring and an O-ring to create a perfect seal between the socket or the plug and its base.

Part-numbers that are compatible with this option are indicated with the symbol in the part-number tables on pages 6 and 7.



Select the ring and seal materials depending on your application, using our new documentation KES P 003.

KES are to be separately ordered.

Protective dust caps (to be separately ordered)

Available for all the models.

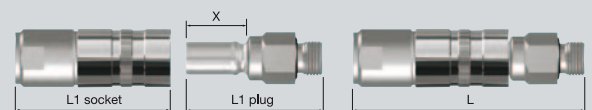
Socket dust cap part-numbers: CBX xx.8500

Plug dust cap part-numbers: CBX xx.8550



Overall dimensions in coupled position



$$L = (L1 \text{ socket} + L1 \text{ plug}) - X$$



Model	X (mm)
CBX 03	18.6
CBX 06	24.7
CBX 09	33
CBX 12	46
CBX 16	57


Part-numbers

Sockets

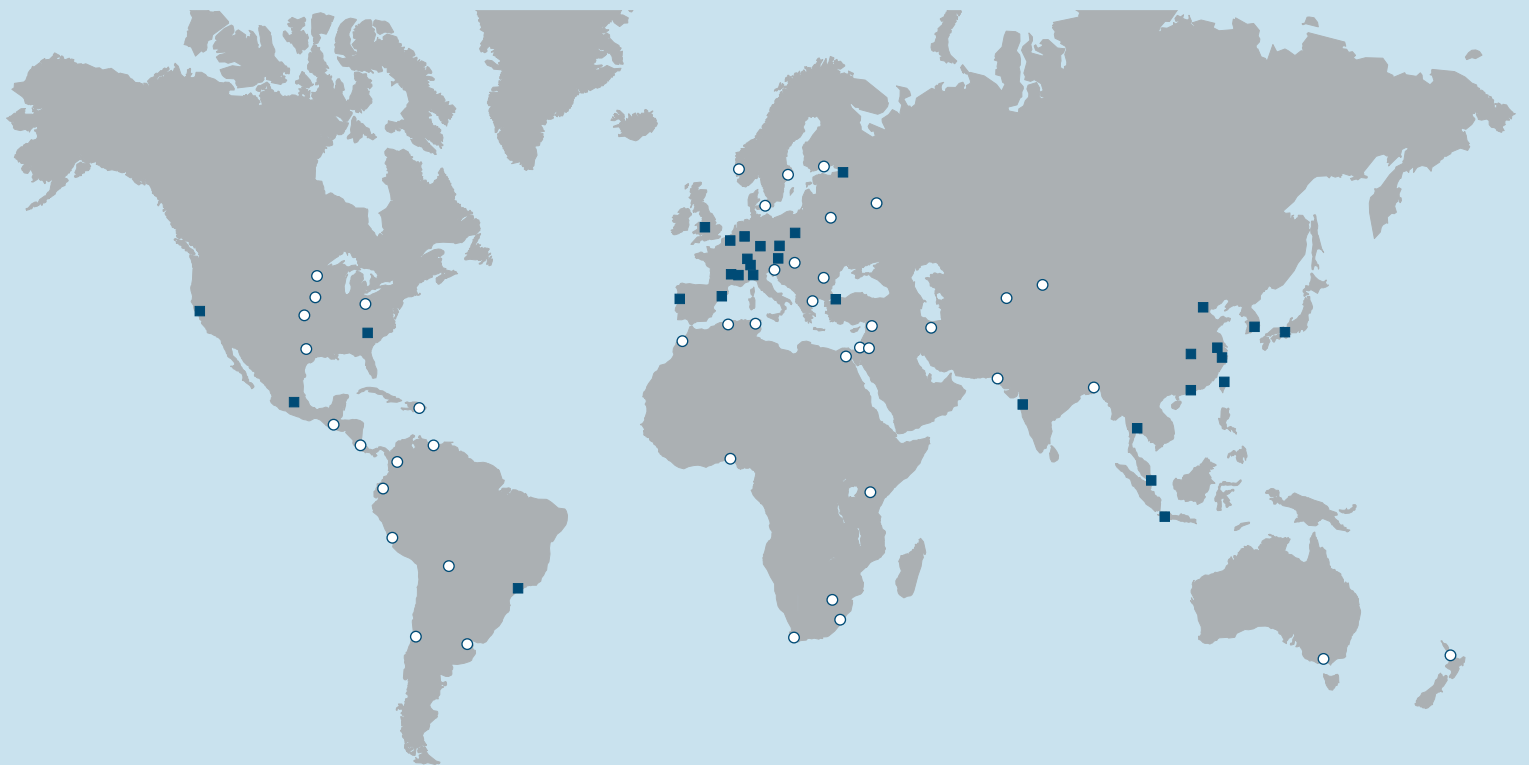
Designations	Models	Thread	Dimensions (mm)					Part-numbers	
			Ø D1	Ø D2	L1	L2	H1/flats	Standard	BF code
Female thread  (not available for NPT thread)	CBX 03	G 1/8	15	17	48.5		13	CBX 03.1100	
		NPT 1/8	15	17	46.5		13	CBX 03.1200	
	CBX 06	G 1/4	22	24	61		20	CBX 06.1101	CBX 06.1101/BF
		G 3/8	22	24	65		21	CBX 06.1102	CBX 06.1102/BF
		NPT 1/4	22	24	61		17	CBX 06.1201	CBX 06.1201/BF
	CBX 09	G 3/8	31.5	36	75.5		24	CBX 09.1102	CBX 09.1102/BF
		G 1/2	31.5	36	79		24	CBX 09.1103	CBX 09.1103/BF
		NPT 3/8	31.5	36	75.5		24	CBX 09.1202	CBX 09.1202/BF
	CBX 12	G 1/2	41	44	103		27	CBX 12.1103	
		NPT 1/2	41	44	103		27	CBX 12.1203	
	CBX 16	G 3/4	53.5	53.5	130		36	CBX 16.1104	
		NPT 3/4	53.5	53.5	128.5		36	CBX 16.1204	
BSP male thread with 60° cone 	CBX 06	G 1/4	22	24	61.5	11	20	CBX 06.1151	
	CBX 09	G 3/8	31.5	36	82	12	24	CBX 09.1152	CBX 09.1152/BF
	CBX 12	G 1/2	41	44	109	14	27	CBX 12.1153	
	CBX 16	G 1	53.5	53.5	137	20	41	CBX 16.1155	
Male thread for steel pipe with 24° cone according to ISO 8434-1 L series	CBX 03	M 12 x 1.5 for pipes outside Ø 6 mm	15	17	50.5	10	13	CBX 03.1606	
	CBX 06	M 14 x 1.5 for pipes outside Ø 8 mm	22	24	61	10	20	CBX 06.1608	CBX 06.1608/BF
		M 16 x 1.5 for pipes outside Ø 10 mm	22	24	60	11	20	CBX 06.1610	CBX 06.1610/BF
	CBX 09	M 18 x 1.5 for pipes outside Ø 12 mm	31.5	36	79	11	24	CBX 09.1612	CBX 09.1612/BF
	CBX 12	M 22 x 1.5 for pipes outside Ø 15 mm	41	44	107.5	12	27	CBX 12.1615	
	CBX 16	M 30 x 2 for pipes outside Ø 22 mm	53.5	53.5	136.5	14	41	CBX 16.1622	

Part-numbers

Plugs

Designations	Models	Thread	Dimensions (mm)						Part-numbers	
			Ø	L1	L2	H1/flats	H2/flats	e max.	Standard	BF code
Female thread  (not available for CBX 03 and CBX 06 nor for NPT thread)	CBX 03	G 1/8		43.5		13			CBX 03.7100	
		NPT 1/8		41.5		13			CBX 03.7200	
	CBX 06	G 1/4		59		17			CBX 06.7101	CBX 06.7101/BF
		G 3/8		61		21			CBX 06.7102	CBX 06.7102/BF
	CBX 09	NPT 1/4		58		17			CBX 06.7201	CBX 06.7201/BF
		G 3/8		71		23			CBX 09.7102	CBX 09.7102/BF
		G 1/2		74		24			CBX 09.7103	CBX 09.7103/BF
	CBX 12	NPT 3/8		70		23			CBX 09.7202	CBX 09.7202/BF
		G 1/2		90		30			CBX 12.7103	
	CBX 16	NPT 1/2		90		30			CBX 12.7203	
		G 3/4		105		38			CBX 16.7104	
			NPT 3/4		102		38		CBX 16.7204	
BSP male thread with 60° cone and integrated tightness	CBX 03	G 1/8		39.5	8	13			CBX 03.7150	
	CBX 06	G 1/4		54	10	17			CBX 06.7151	CBX 06.7151/BF
	CBX 09	G 3/8		67	11	23			CBX 09.7152	CBX 09.7152/BF
	CBX 12	G 1/2		85	14	30			CBX 12.7153	
	CBX 16	G 3/4		100.5	15	38			CBX 16.7154	
		G 1		105.5	20	41			CBX 16.7155	
Panel mounted, BSP male thread with 60° cone	CBX 03	G 1/8	12.5	46	8	13	15	4.5	CBX 03.5150	
	CBX 06	G 1/4	16.5	60.5	11	17	21	4	CBX 06.5151	CBX 06.5151/BF
	CBX 09	G 3/8	22.5	72	12	23	27	4	CBX 09.5152	CBX 09.5152/BF
	CBX 12	G 1/2	28.5	96	14	30	34	6	CBX 12.5153	
	CBX 16	G 3/4	36.5	111.5	16	38	46	5	CBX 16.5154	
Male thread for steel pipe with 24° cone according to ISO 8434-1 L series	CBX 03	M 12 x 1,5 for pipes outside Ø 6 mm		40	10	13			CBX 03.7606	
	CBX 06	M 14 x 1,5 for pipes outside Ø 8 mm		52	10	17			CBX 06.7608	CBX 06.7608/BF
		M 16 x 1,5 for pipes outside Ø 10 mm		53	11	17			CBX 06.7610	CBX 06.7610/BF
	CBX 09	M 18 x 1,5 for pipes outside Ø 12 mm		65	11	23			CBX 09.7612	CBX 09.7612/BF
	CBX 12	M 22 x 1,5 for pipes outside Ø 15 mm		81	12	30			CBX 12.7615	
	CBX 16	M 30 x 2 for pipes outside Ø 22 mm		97.5	14	38			CBX 16.7622	
BSP conical male thread	CBX 12	R 1/2		89	15	30			CBX 12.7163	

For contact details: www.staubli.com/connectors/contacts



Global presence of the Stäubli Group

- Stäubli units
- Agents

International sales coordination

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