

FAST MOVING TECHNOLOGY



CBX

Hydraulics



Anti-pollution technology...





... servicing your hydraulic applications

- Mineral or synthetic oil
- Lubricating oil

A wider range

The CBX is now available in **5 nominal bore sizes**: 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

Push; and it's connected

Automatic locking CBXs give you ever easier handling.

A concept that is especially suitable for:

- blind connection
- repeated connections

Excellent mechanical strength

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

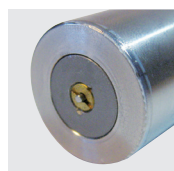
Flat faces guarantee the integrity of fluids

No pollution enters your circuits.

Compact design

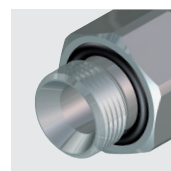
Especially suitable for difficult access situations.

Connection under residual pressure



A central relief valve built into the socket or the plug valve reduces the residual pressure in the circuit.

Ease of connection



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



Sealing using the KES ring sealing-kit possible **on all cylindrical BSP thread sockets** (see

pages 5, 6 and 7).

Efficiency

Maximum flow in the smallest size.

Technical data

		CBX 03	CBX 06	CBX 09	CBX 12	CBX 16
Nominal diameter DN (mm)		3	6	9	12	16
Maximum allowable pressure PS (bar)		450	180	180	180	180
Shut-off	double					

Minimum and maximum allowable temperatures without dust cap

Type of seal	Minimum and maximum allowable temperatures TS (°C)
Nitrile (NBR)	-15 and +100
Fluorocarbon (FPM)	-10 and +200
Perfluoroelastomer (FFKM)	0 and +250
Ethylene-propylene (EPDM)*	-20 to +150

* **Important!** Never use Ethylene-Propylene seals with fluids of mineral origin (oil, fat etc...)

Minimum and maximum allowable temperatures TS for dust caps in Chloroprene

(CR): -20 and +100 °C.

For other temperatures, please contact us for more information.

Construction

CBX 06, CBX 09 and CBX 16: brass and stainless steel.

CBX 03 and CBX 12: stainless steel.

CBX 06 and CBX 09 with BF code: stainless steel in the fluid stream.

Sealing

Seals:

- Nitrile (NBR) as standard
- Fluorocarbon (FPM)
- Ethylene-Propylene (EPDM)*
- Perfluoroelastomer (FFKM) in the fluid jet

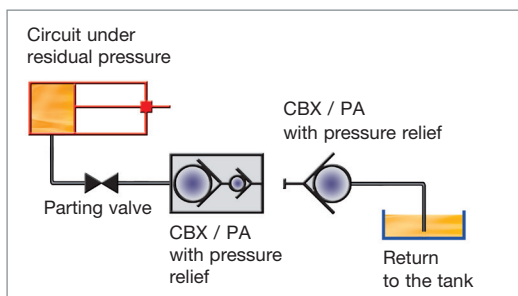
Other seal materials available on request.

Connection under residual pressure (/PA option)

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

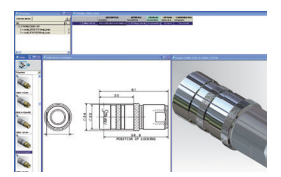
Part numbers of sockets and plugs with /PA option: add the /PA code to the part numbers pages 6 and 7.

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
Maximum allowable pressure PS (bar)		180	180	180
Max. residual pressure for connection under pressure (bar)	Socket	40	60	40
	Plug	150	150	150

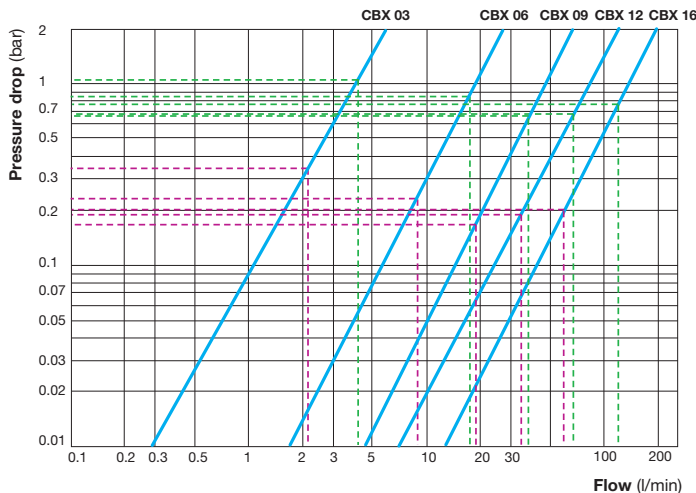
CAD files available on request from our sales network.



Hydraulic flow rate / pressure drop chart

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



V = 5 m/s ---
V = 10 m/s ---


Test conditions:

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

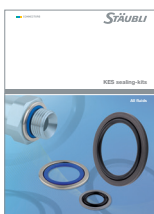
	CBX 03	CBX 06	CBX 09	CBX 12	CBX 16
CV	0.27	1.28	3.29	5.77	9.73

Options

KES sealing kits

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

KES kits are to be ordered separately.



Select the specific ring and seal materials for your application, using our new documentation KES RP003.

Protective dust caps

(To be ordered separately)

Available for all models in this range.



Socket dust cap part number:

CBX xx.8500



Plug dust cap part number:

CBX xx.8550

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

JE: Ethylene-Propylene seals

JKV: Perfluoroelastomer seals (in the fluid jet)

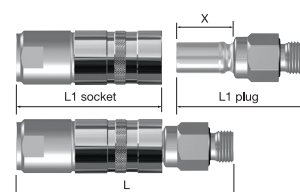
Ex.: CBX 09.1102/JV

(no code: Nitrile seals)

Overall dimensions in connected position:


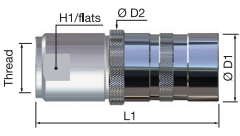
$$L = (L1 \text{ socket} + L1 \text{ plug}) - X$$


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

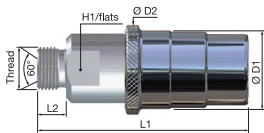


Part numbers

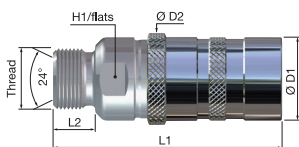
Sockets

Designations	Models	Thread	Dimensions (mm)					Part numbers	
			Ø D1	Ø D2	L1	L2	H/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		


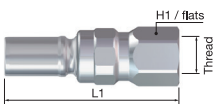
BSP male thread with 60° cone 	CBX 06	G 1/4	22	24	61.5	11	20	CBX 06.1151	
	CBX 09	G 3/8	31.5	36	82	12	24	CBX 09.1152	CBX 09.1152/BF
	CBX 12	G 1/2	41	44	109	14	27	CBX 12.1153	
	CBX 16	G 1	53.5	53.5	137	20	41	CBX 16.1155	

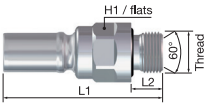


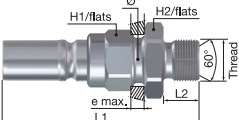
Male thread for steel pipe with 24° cone according to ISO 8434-1 L series	CBX 03	M 12 x 1.5 for pipes outside Ø 6 mm	15	17	50.5	10	13	CBX 03.1606	
	CBX 06	M 14 x 1.5 for pipes outside Ø 8 mm	22	24	61	10	20	CBX 06.1608	CBX 06.1608/BF
		M 16 x 1.5 for pipes outside Ø 10 mm	22	24	60	11	20	CBX 06.1610	CBX 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	

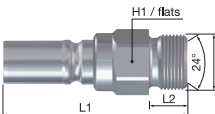


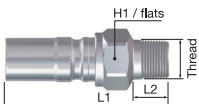
Plugs

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
		NPT 1/4		58		17			CBX 06.7201	CBX 06.7201/BF
CBX 09	G 3/8		71		23			CBX 09.7102	CBX 09.7102/BF	
	G 1/2		74		24			CBX 09.7103	CBX 09.7103/BF	
	NPT 3/8		70		23			CBX 09.7202	CBX 09.7202/BF	
CBX 12	G 1/2		90		30			CBX 12.7103		
	NPT 1/2		90		30			CBX 12.7203		
CBX 16	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	
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● Stäubli Units ○ Representatives/Agents

Global presence of the Stäubli Group

www.staubli.com

