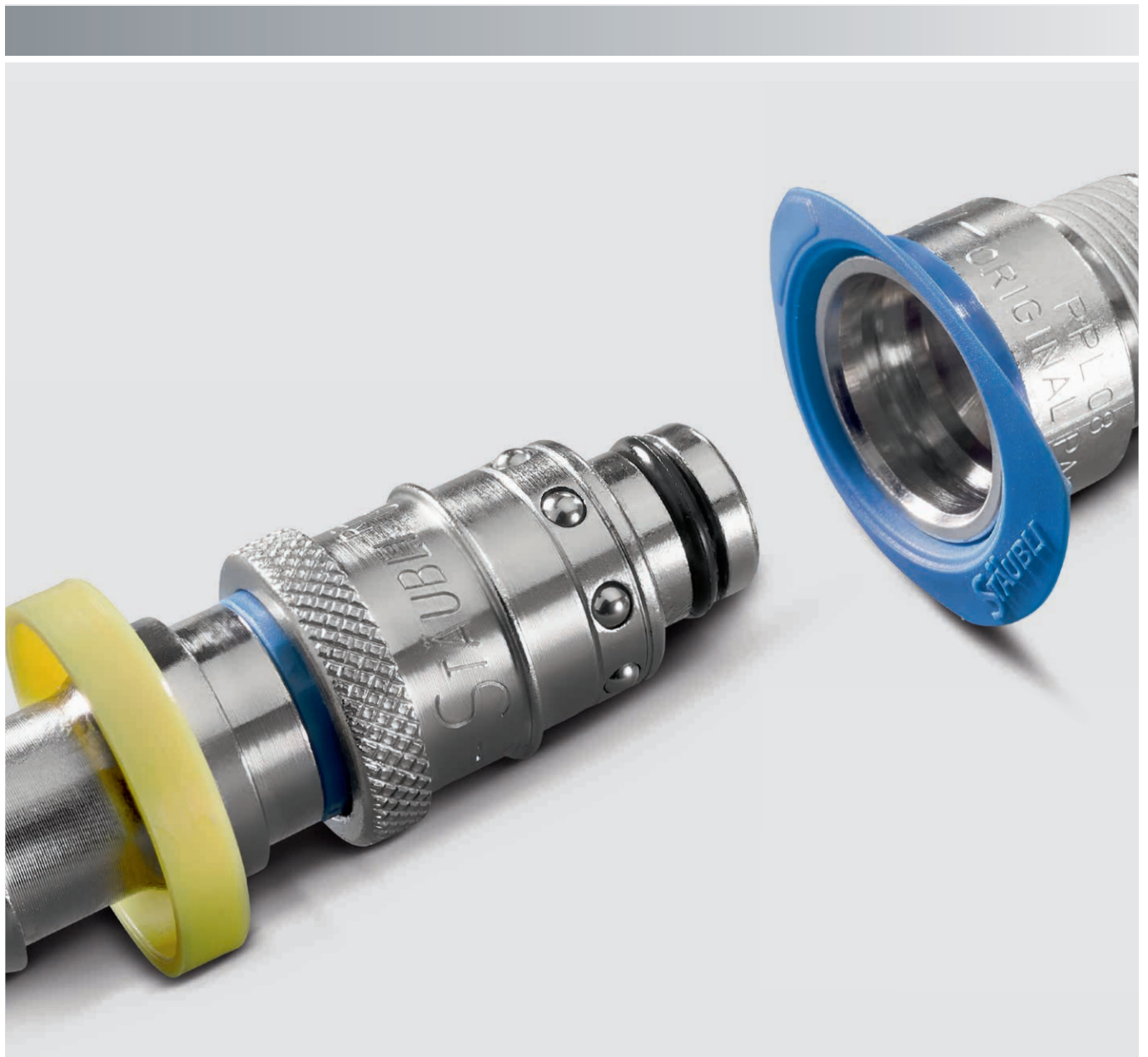


RPL quick release couplings

Temperature control | Full flow



The full flow solution...

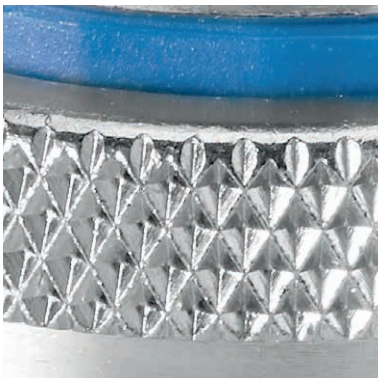


Automatic
Ball-locking mechanism



US 7 503 592
and other countries





Knurling

Ergonomic knurled ring



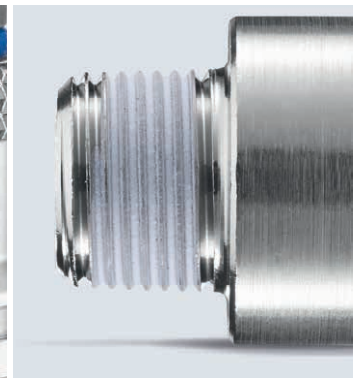
Coloured ring

Circuit identification using different colours



Original parts

Always use original Stäubli parts



PTFE-coating

For perfect sealing

... economical and effective

Quick and easy circuit identification

Plugs and sockets are equipped with red or blue coloured rings to enable fast circuit identification. To further differentiate circuits, the sockets can also be numbered.

Secure locking

The robust locking system ensures a perfect seal on circuits.

The locked position can be visually checked due to the coloured ring on the plug.

Ergonomic connection and disconnection

The knurled locking ring makes it easy to grip the plug and one handed connections and disconnections are possible.

For difficult to reach locations, a shoulder (RPL 08 and RPL 12 mm) or a groove (RPL 06 mm) can be situated on the locking ring to enable access.

Immediate sealing

The male threaded straight sockets are PTFE-coated and guarantee immediate sealing of connections (screwdriver, etc.).

High flow rates

The full flow design enables high flow rates and eliminates the risk of scaling.

Efficient maintenance

Seal replacement is quick and easy with no loss of time impacting productivity.

Strength and reliability



Coloured ring not visible = connection incomplete



Coloured ring visible = connection complete
Blue **/KB**, red **/KR** or black ring.

Applications

Connection of cold and hot fluid circuits, particularly for temperature control of moulds on injection moulding machines.

3 diameters and over
300 variations
to cover all your requirements



RPL 06



RPL 08



RPL 12

With three flow diameters, the RPL range offers solutions for temperature control of moulds whatever the flow.

Simple integration

Suitable for both existing and new moulds

On new moulds



Flush fitting

- Easy mould storage
- No risk of damage to sockets

On existing moulds



Slightly raised fitting

Extension options

In nickel-plated brass, smooth or threaded, these robust, rigid, one-piece extension sockets are easily fitted onto moulds. The one-piece construction offers high strength and rigidity.

Available in various lengths, they are suitable for all your installations and different configurations.



Threaded finish (RPL 08):

- 3 available lengths in G 1/8
- 4 available lengths in G 1/4

Smooth finish:

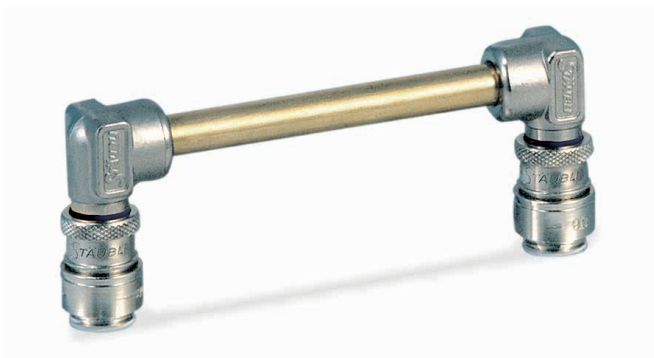
- RPL 06: 1 length
- RPL 08: 4 lengths
- RPL 12: 3 lengths

Streamlined circuits

Bridge options

Bridge pieces comprise two non-threaded RPL 08 plugs and a calibrated cold-drawn brass tube.

These options can be used to reduce the size of installations whilst also simplifying maintenance operations. In addition, the flexible design compensates for any misalignments when assembling.



Technical specifications



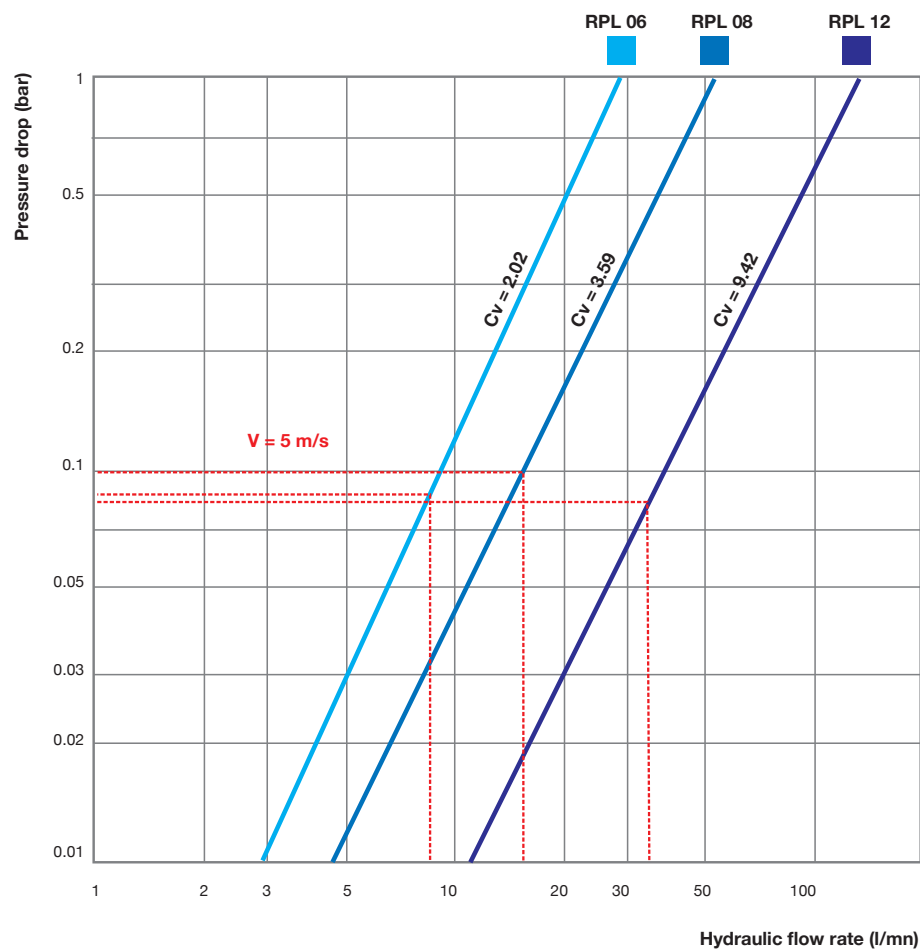
Part numbers	RPL 06	RPL 08	RPL 12
Nominal diameter DN (mm)	6	8	12
Maximum allowable pressure PS (bar)	10	10	10
Minimum and maximum allowable temperatures TS (°C)	- 15 and +90*	- 15 and +90*	- 15 and +90*

*For other conditions, please ask us.

Construction

- Nickel plated brass socket, with PTFE pre-applied (straight male threaded sockets)
- Nickel plated brass plug and extension
- Nitrile (NBR) seal and other seals available to order
- 18/8 stainless steel spring and balls
- RPL 06: 6 balls,
RPL 08 and 12: 8 balls

Flow rate / pressure drop hydraulic charts



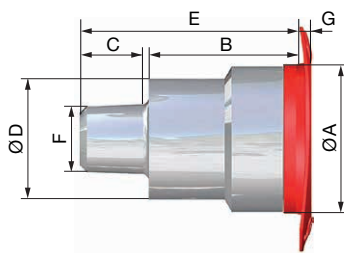
Test conditions:

- Flow direction: socket → plug
- Water (density 998 kg/m³, viscosity 1.08 cSt)



Part numbers

Straight socket male thread, PTFE pre-applied



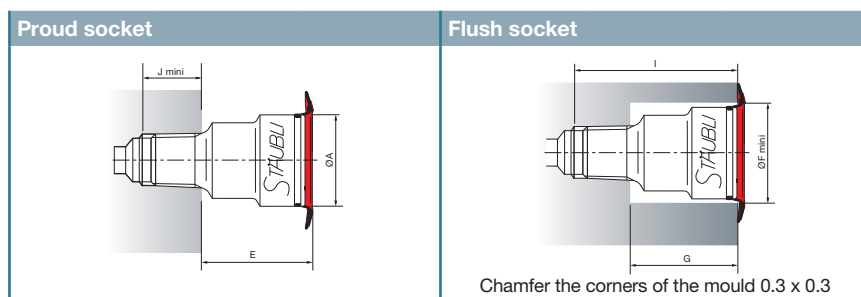
R 1/8" = G 1/8 co.

Model	F thread	Dimensions (mm)							Part numbers without coloured ring
		ØA	B	C	Ø	E	G	Allen key	
RPL 06	R 1/8	17	18.5	7.5	14	28.5	1.5	6	RPL06.1150
	NPT 1/8	17	18.5	7	14	28.5	1.5	6	RPL06.1250
	R 1/4	17	15.5	11	14	28.5	1.5	6	RPL06.1151
	NPT 1/4	17	-	11	-	29.5	1.5	6	RPL06.1251
RPL 08	R 1/8	21	22	8	17.5	32	1.5	6	RPL08.1150
	NPT 1/8	21	22	7	17.5	32	1.5	1/4"	RPL08.1250
	R 1/4	21	21	10	17.5	33	1.5	8	RPL08.1151
	NPT 1/4	21	21	11	17.5	33	1.5	5/16"	RPL08.1251
	R 3/8	21	11	11	-	24	1.5	8	RPL08.1152
	NPT 3/8	21	11	11	-	24	1.5	5/16"	RPL08.1252
RPL 12	R 3/8	32	28	11	25	41	2	10	RPL12.1152
	NPT 3/8	32	28	11	25	41	2	3/8"	RPL12.1252
	R 1/2	32	28	14	25	44	2	14	RPL12.1153
	NPT 1/2	32	28	14	25	44	2	9/16"	RPL12.1253
	R 3/4	32	13	16.5	-	32	2	14	RPL12.1154
	NPT 3/4	32	13	14	-	32	2	9/16"	RPL12.1254

With blue ring add **/KB** to the part number

With red ring add **/KR** to the part number

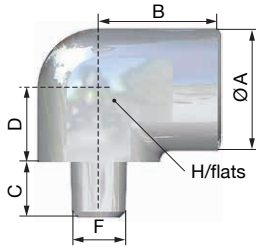
Installation dimensions for the socket in the mould



Model	Tapping	ØA	E	J mini	ØF mini	G	I	Allen key
RPL 06	G 1/8	17	20	10	18.5	20.5	29.5	6
	NPT 1/8	17	22	10	18.5	22.5	31.5	1/4"
	G 1/4	17	18	13	18.5	18.5	30.5	6
	NPT 1/4	17	20	13.5	18.5	20.5	33	1/4"
RPL 08	G 1/8	21	23	10	22.5	24	33	6
	NPT 1/8	21	25.5	10	22.5	25.5	35	1/4"
	G 1/4	21	22	12	22.5	23	34	8
	NPT 1/4	21	24	12	22.5	23.5	35.5	5/16"
	G 3/8	21	12	13	22.5	13	25	8
	NPT 3/8	21	14	13	22.5	14	27	5/16"
RPL 12	G 3/8	32	29	13	33.5	30	42	10
	NPT 3/8	32	33	13	33.5	33	46	3/8"
	G 1/2	32	30	15	33.5	31	45	14
	NPT 1/2	32	35	15	33.5	34.5	51	9/16"
	G 3/4	32	15	18	33.5	20	36	14
	NPT 3/4	32	17.5	18	33.5	17.5	36.5	9/16"

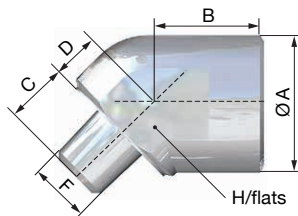
Part numbers

Socket 90° male thread



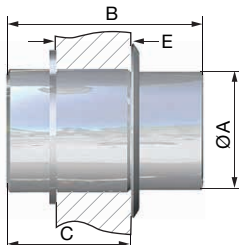
Model	F thread	Dimensions (mm)					Part numbers
		ØA	B	C	D	H/flats	
RPL 08	R 1/8	22	22	10	13	19	RPL08.1150/RE
	R 1/4	22	22	12	13	19	RPL08.1151/RE
	NPT 1/4	22	22	14	13	19	RPL08.1251/RE
	R 3/8	22	22	13	13	19	RPL08.1152/RE

Socket 135° male thread



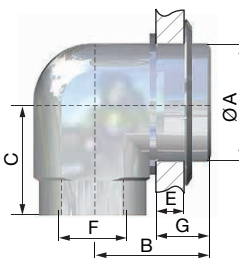
Model	F thread	Dimensions (mm)					Part numbers
		ØA	B	C	D	H/flats	
RPL 08	R 1/8	22	18.5	10	6.5	19	RPL08.1150/RO
	R 1/4	22	18.5	12	4.5	19	RPL08.1151/RO
	R 3/8	22	18.5	12	4.5	19	RPL08.1152/RO

Bulkhead union



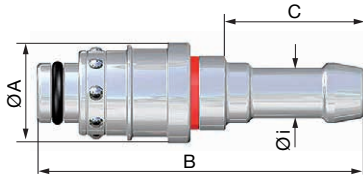
Model	Dimensions (mm)				Part numbers
	ØA	B	C	E	
RPL 08	22	35	23	10 maxi	RPL08.2000

90° female threaded bulkhead union



Model	F thread	Dimensions (mm)					Part numbers
		ØA	B	C	E	G	
RPL 08	G 1/4	22	22	21	6.5 maxi	10	RPL08.2101/RE

Straight plug for hose

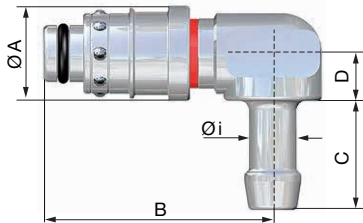


Model	Dimensions (mm)				Part numbers with a black ring
	Øi	ØA	B	C	
RPL 06	8	17	55	23	RPL06.6808
	6	20	66	28	RPL08.6806
RPL 08	8	20	66	28	RPL08.6808
	10	20	66	28	RPL08.6810
	12.5	20	66	28	RPL08.6812
RPL 12	13	28	78	33	RPL12.6813
	16	28	78	33	RPL12.6816

With blue ring add **/KB** to the part number

With red ring add **/KR** to the part number

Plug 90° for hose

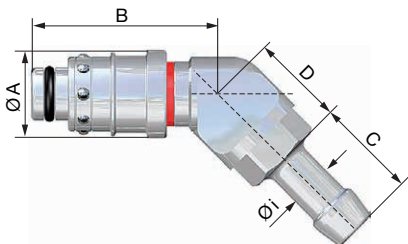


Model	Dimensions (mm)					Part numbers with a black ring
	Øi	ØA	B	C	D	
RPL 08	6	20	48.5	28	23.5	RPL08.6806/RE
	8	20	48.5	23	23.5	RPL08.6808/RE
	10	20	48.5	23	10	RPL08.6810/RE
	12.5	20	48.5	28	10	RPL08.6812/RE
RPL 12	13	28	75.5	33	27	RPL12.6813/RE
	16	28	75.5	33	27	RPL12.6816/RE

With blue ring add **/KB** to the part number

With red ring add **/KR** to the part number

Plug 135° for hose

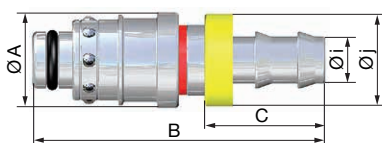


Model	Dimensions (mm)					Part numbers with a black ring
	Øi	ØA	B	C	D	
RPL 08	6	20	43	28	21	RPL08.6806/RO
	8	20	43	23	21	RPL08.6808/RO
	10	20	43	23	21	RPL08.6810/RO
	12.5	20	43	28	21	RPL08.6812/RO
RPL 12	13	28	72	33	24	RPL12.6813/RO
	16	28	72	33	24	RPL12.6816/RO

With blue ring add **/KB** to the part number

With red ring add **/KR** to the part number

Straight plug for self-locking hose



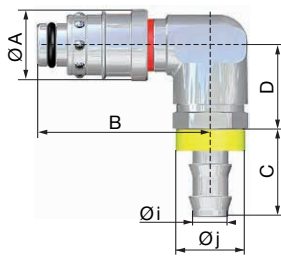
Model	Dimensions (mm)					Part numbers with a black ring
	Øi	ØA	B	C	Øj	
RPL 08	3/8"	20	62	24.5	19.5	RPL08.6810/CN
	1/2"	20	69	29	23.5	RPL08.6813/CN
RPL 12	1/2"	28	74	29	23.5	RPL12.6813/CN
	5/8"	28	81.5	36.5	27	RPL12.6816/CN

With blue ring add **/KB** to the part number

With red ring add **/KR** to the part number

Part numbers

Plug 90° for self-locking hose

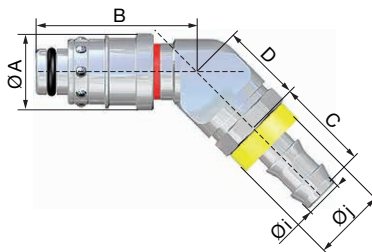


Model	Dimensions (mm)						Part numbers with a black ring
	Øi	ØA	B	C	D	Øj	
RPL 08	3/8"	20	48.5	24.5	23.5	19.5	RPL08.6810/CN/RE
	1/2"	20	48.5	29	25.5	23.5	RPL08.6813/CN/RE
RPL 12	1/2"	28	75.5	29	30.5	23.5	RPL12.6813/CN/RE
	5/8"	28	75.5	36.5	30	27	RPL12.6816/CN/RE

With blue ring add **/KB** to the part number

With red ring add **/KR** to the part number

Plug 135° for self-locking hose

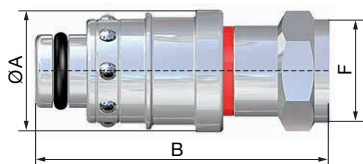


Model	Dimensions (mm)						Part numbers with a black ring
	Øi	ØA	B	C	D	Øj	
RPL 08	3/8"	20	43	24.5	21	19.5	RPL08.6810/CN/RO
	1/2"	20	43	29	23	23.5	RPL08.6813/CN/RO
RPL 12	1/2"	28	72	29	27.5	23.5	RPL12.6813/CN/RO
	5/8"	28	72	36.5	27	27	RPL12.6816/CN/RO

With blue ring add **/KB** to the part number

With red ring add **/KR** to the part number

Straight plug female threaded

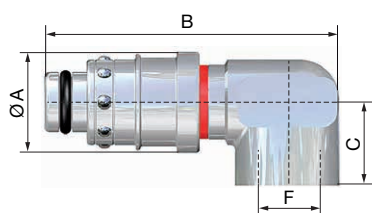


Model	Dimensions (mm)			Part numbers with a black ring
	F	ØA	B	
RPL 08	G 1/4	20	48.5	RPL08.6101
	NPT 1/4	20	48.5	RPL08.6201
RPL 12	G 1/2	28	61	RPL12.6103
	NPT 1/2	28	63	RPL12.6203

With blue ring add **/KB** to the part number

With red ring add **/KR** to the part number

Plug 90° female threaded

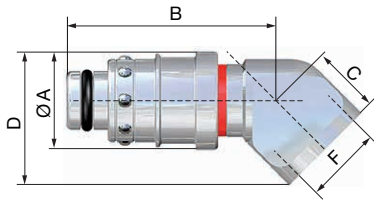


Model	F thread	Dimensions (mm)				Part numbers with a black ring
		ØA	B	C	E	
RPL 08	G 1/4	20	48.5	16.5	31	RPL08.6101/RE
	NPT 1/4	20	60.5	15	38.9	RPL08.6201/RE
RPL12	G 3/8	28	75.5	20	52.9	RPL12.6102/RE
	NPT 3/8	28	75.5	20	52.9	RPL12.6202/RE

With blue ring add **/KB** to the part number

With red ring add **/KR** to the part number

Plug 135° female threaded

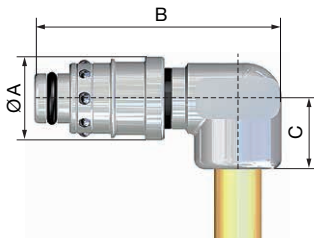


Model	F thread	Dimensions (mm)				Part numbers with a black ring
		ØA	B	C	D	
RPL 08	G 1/4	20	43	14	27.5	RPL08.6101/RO
	NPT 1/4	20	57.5	14.5	28.5	RPL08.6201/RO
RPL12	G 3/8	28	72	17	33	RPL12.6102/RO
	NPT 3/8	28	72	17	33	RPL12.6202/RO

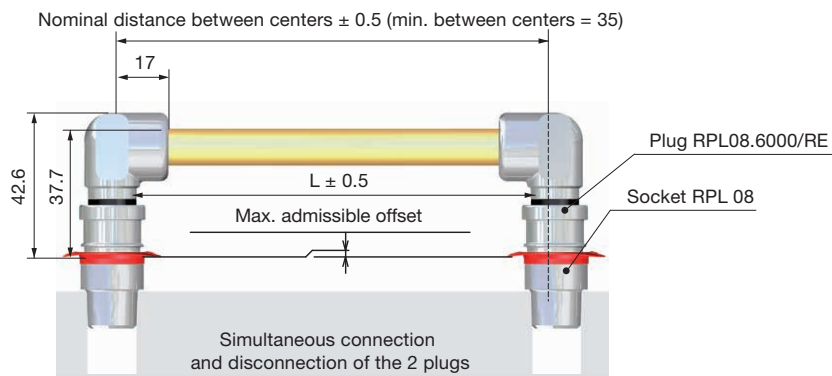
With blue ring add **/KB** to the part number

With red ring add **/KR** to the part number

RPL 08 Bridge



Model	Dimensions (mm)			Part numbers with a black ring
	ØA	B	C	
90° plug RPL 08	20	59	17	RPL08.6000/RE
Tube	Tube, supply length = 1 m			R113 910 00



Max. offset allowed = Nominal distance between centers x 0.02

Pipe preparation recommendation

Tube preparation

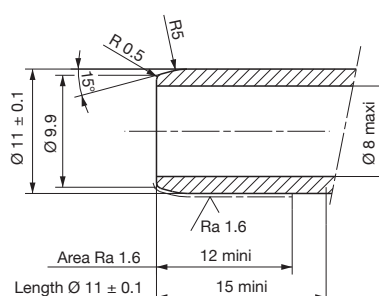
Tube length

$L = (\text{Nominal distance between centers} - 10) \pm 0.5$

E.g.: if the nominal distance between centers is 100 mm, $L = (100 - 10) \pm 0.5 = 90 \pm 0.5$

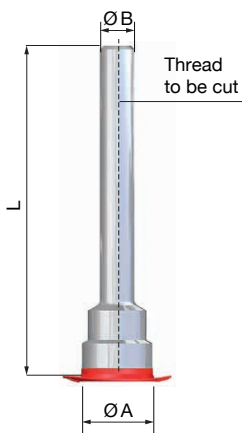
Pipe supplied in 1 m length to be adapted to your needs

Machining of the ends



Part numbers

Monobloc extended sockets: smooth finish

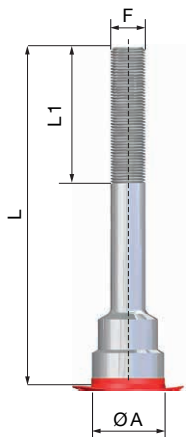


Model	Thread to be cut	Dimensions (mm)								Part numbers without coloured rings
		L Min. / max.	ØA	ØB	L2	G	ØC	ØF mini	H/ flats	
RPL 06	R 1/8 or NPT 1/8	33/100	17	10,2	L-5.5	20	11	18.5	6	RPL06.1010/100/R
		100/150	21	10.2	L-5.5	23	11	22.5	6	
		150/200	21	10.2	L-5.5	23	11	22.5	6	
		200/250	21	10.2	L-5.5	23	11	22.5	6	
RPL 08	R 1/8 or NPT 1/8	34/100	21	13.5	L-7.5	23	14	22.5	8	RPL08.1011/100/R
		100/150	21	13.5	L-7.5	23	14	22.5	8	
		150/200	21	13.5	L-7.5	23	14	22.5	8	
		200/250	21	13.5	L-7.5	23	14	22.5	8	
RPL 12	R 3/8 or NPT 3/8	56/150	32	17.2	L-8.5	43	18	33.5	14	RPL12.1002/150/R
		150/200	32	17.2	L-8.5	43	18	33.5	14	
		200/250	32	17.2	L-8.5	43	18	33.5	14	
		200/250	32	17.2	L-8.5	43	18	33.5	14	
	R 1/2 or NPT 1/2	59/150	32	21.3	L-11.5	45	22	33.5	14	RPL12.1003/150/R
		150/200	32	21.3	L-11.5	45	22	33.5	14	
		200/250	32	21.3	L-11.5	45	22	33.5	14	
		200/250	32	21.3	L-11.5	45	22	33.5	14	

With blue ring add **/KB** to the part number

With red ring add **/KR** to the part number

Monobloc extended sockets: threaded finish

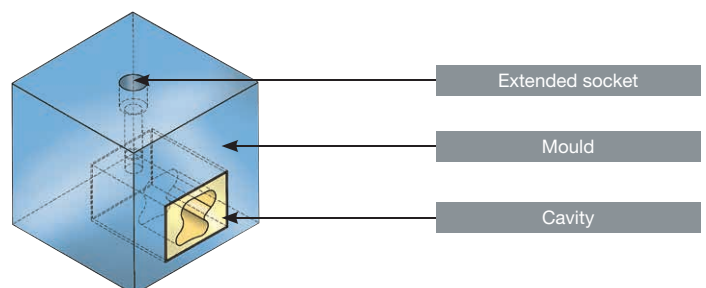
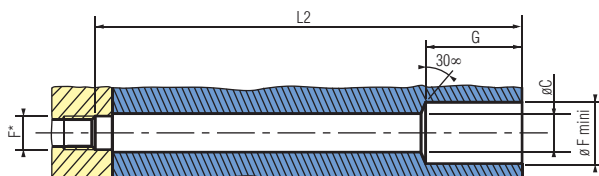


Model	Thread	Dimensions (mm)								Part numbers without coloured rings
		L Min. / maxi	L 1 threaded	Øa	L2	G	ØC	ØF mini	H/ flats	
RPL 08	G 1/8	34/50	26	21	L-5.5	23	11	22.5	6	RPL08.1010/50/RF
		50/100	60	21	L-5.5	23	11	22.5	6	
		100/150	60	21	L-5.5	23	11	22.5	6	
	G 1/4	38.5/50	26.5	21	L-7.5	23	14	22.5	8	RPL08.1011/50/RF
		55/100	60	21	L-7.5	23	14	22.5	8	
		105/150	60	21	L-7.5	23	14	22.5	8	
		155/200	60	21	L-7.5	23	14	22.5	8	
		200/250	60	21	L-7.5	23	14	22.5	8	

With blue ring add **/KB** to the part number

With red ring add **/KR** to the part number

Installation of the sockets in the mould



Additional equipment

Replacement Nitrile seal for plug



Available in packs of 10

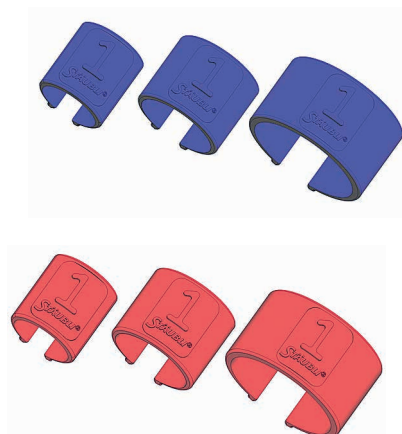
Model	Part numbers
RPL 06	R603 507 11
RPL 08	R600 007 11
RPL 12	R600 011 10

Temperature control hoses



Information about our range of dedicated hoses can be found in document RN210.

Colour identification collar for hose



Available in packs of 25 red or blue collars.

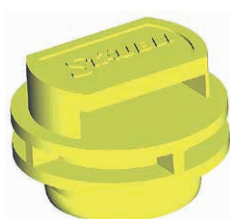
To construct your part numbers

R 213 8	Ø collar	collar colour	collar number
Common section	13 Hose outside Ø13 to 17 mm	Blue collar 7	from 0 to 9
	17 Hose outside Ø17 to 24 mm	Red collar 3	
	24 Hose outside Ø24 to 28 mm		
R 213 8			

E.g.: R 213 8 13 7 0 → R 213 813 70 (Blue collar Ø13 engraved 0)

R 213 8 24 3 5 → R 213 824 35 (Red collar Ø24 engraved 5)

Protective dust cap for socket



Ensure cleanliness of your circuit	Part numbers
Available in box of 100 plugs Construction: yellow polyethylene	RPL08.8500/100



■ Stäubli units ○ Agents

Global presence of the Stäubli Group

www.staubli.com