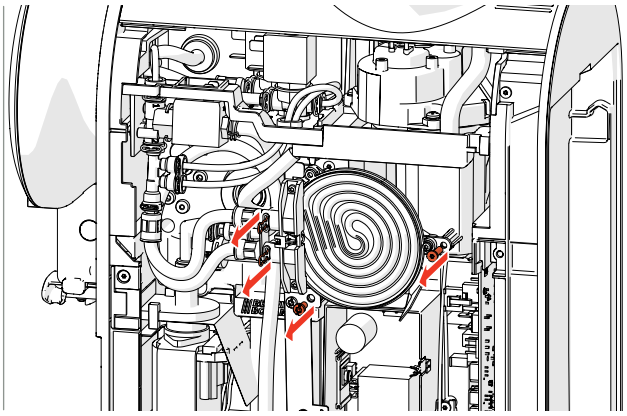
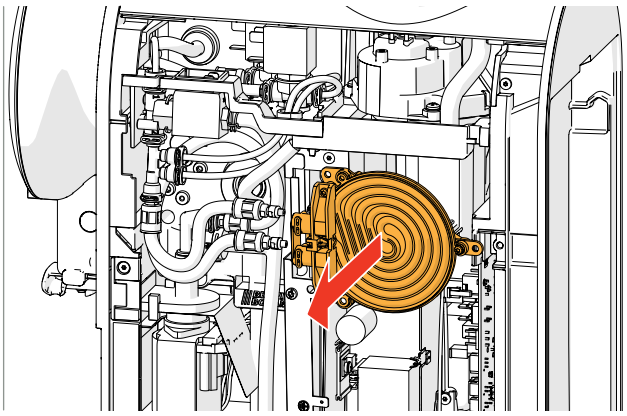
2.10 Remove flash heater



Step 1
- remove the 2 screws
- remove the 2 locking clips to disconnect the hoses (consider to exchange the O-rings)

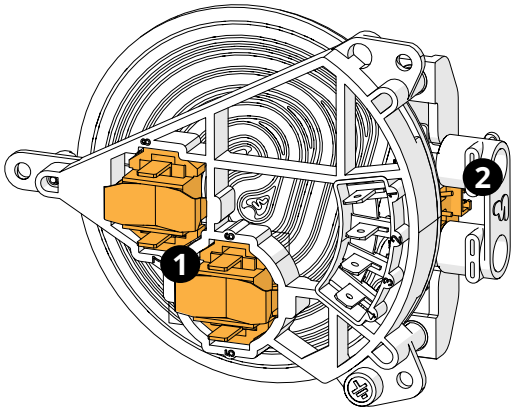
► *The lower connection is the cold water input.*

► *The upper connection is the hot water output.*



Step 2
- disconnect the wiring
- remove the flash heater

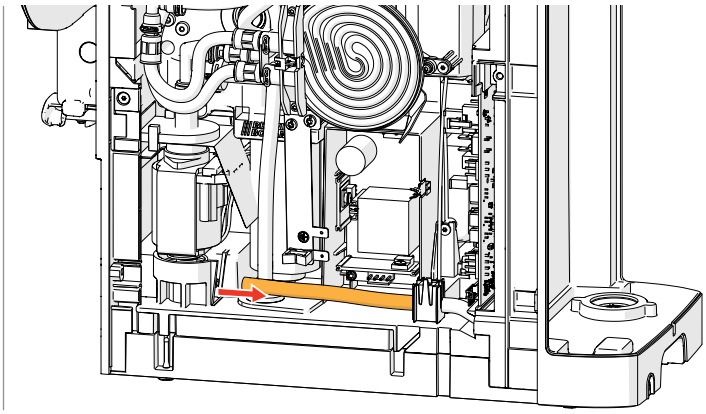
► *Consider to exchange the O-rings.*



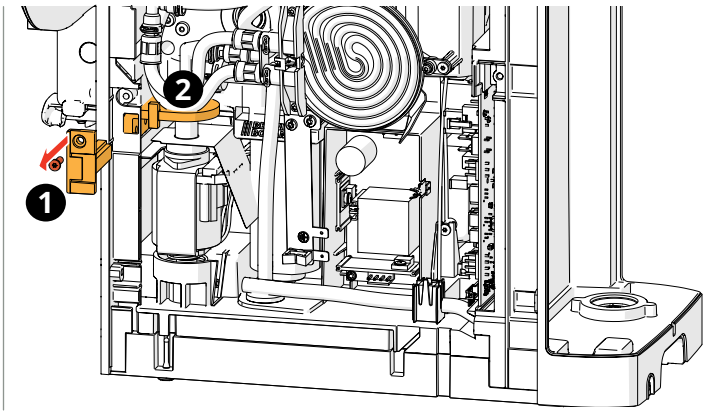
1. high temperature safety switches (non reset-able)
2. temperature sensor

► *Make sure that the hoses of the flash heater are installed correctly, see section "2.14 Hose positions" on page 22.*
If the hoses are swapped, the Sprso will steam instead of giving hot water when the flash heater is switched on.

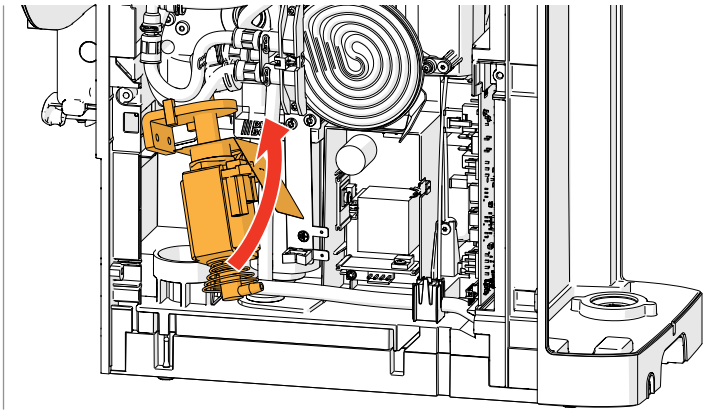
2.11 Remove pump



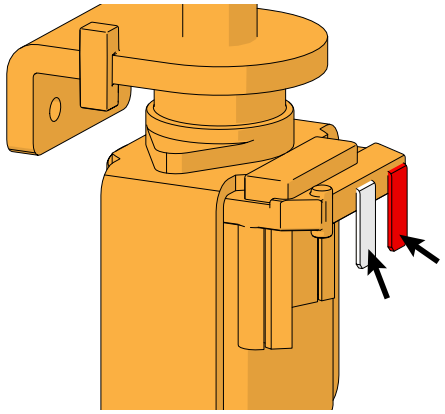
Step 1
- disconnect the hose from the pump



Step 2
1. remove the pump bracket
2. loosen the mounting bracket



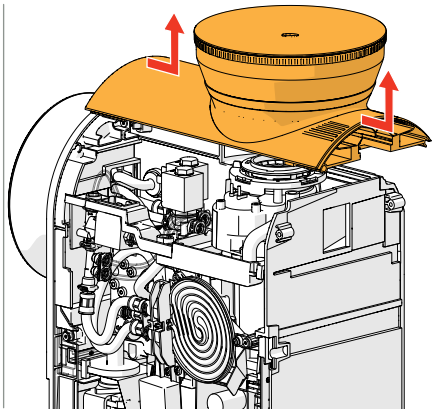
Step 3
- disconnect the wiring
- remove the pump



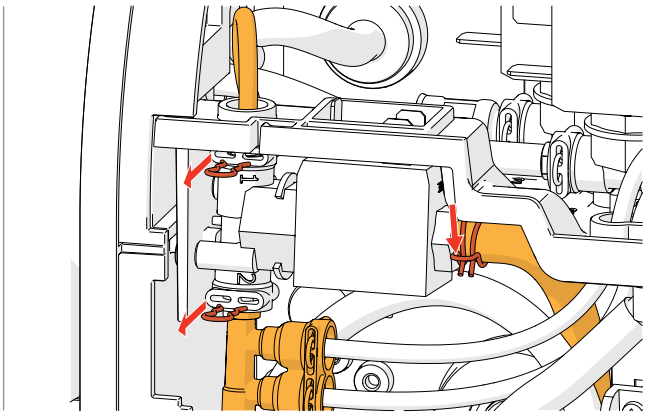
Pump wiring:
- red wire rear
- white wire in front

► *Connect the wires of the pump as shown, reversing the wires may result in error 00201.*

2.12 Remove valve set

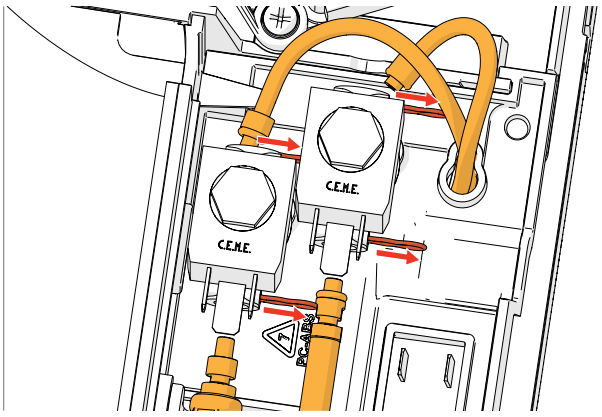


Step 1
- remove both side panels and the back panel
- remove the top of the machine

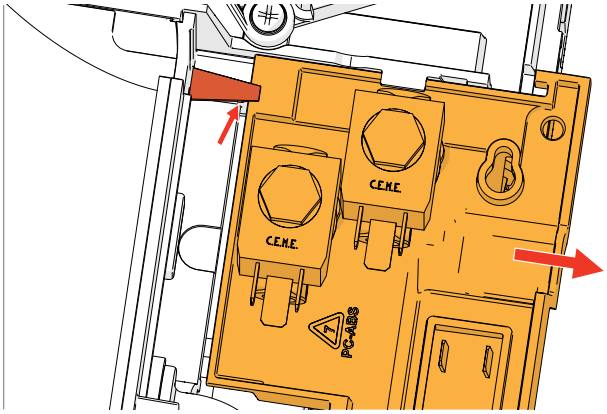


Step 2
- remove the 2 locking clips and the clamp to disconnect the hoses from water valve of the brewer

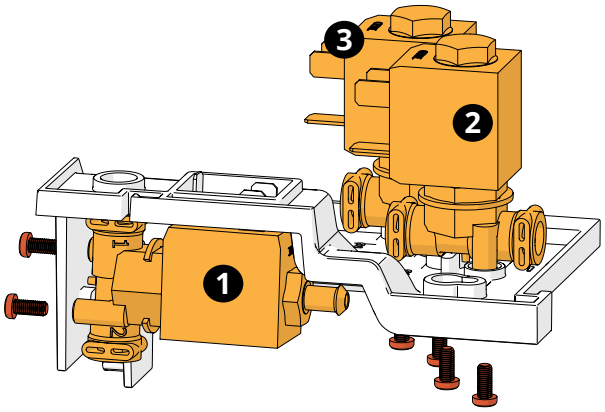
► *Consider to exchange the O-rings.*



Step 3
- remove the 4 locking clips to disconnect the hoses from the other water valves
- disconnect the wiring



Step 4
- lift the click finger slightly to remove the mounting plate with the valves

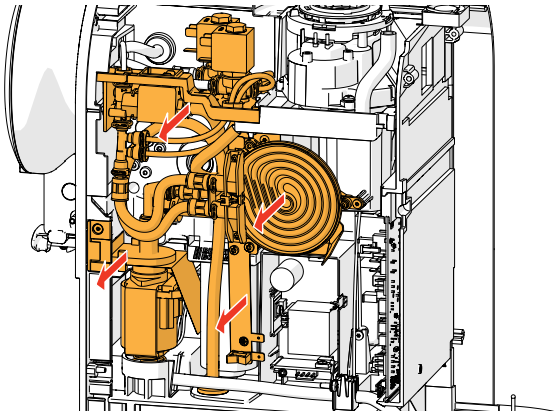


Step 5

- remove the defective valve
  1. brewer valve
  2. hot water valve
  3. steam valve

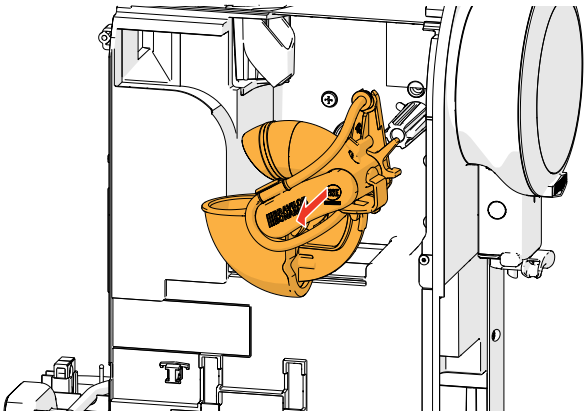
► *Consider to exchange the O-rings.*

2.13 Remove brewer motor

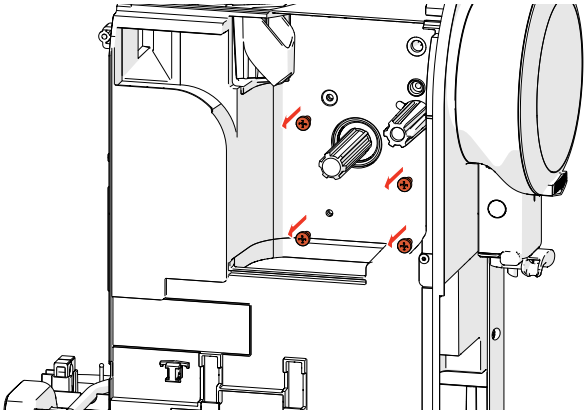


Step 1
- remove all coloured parts

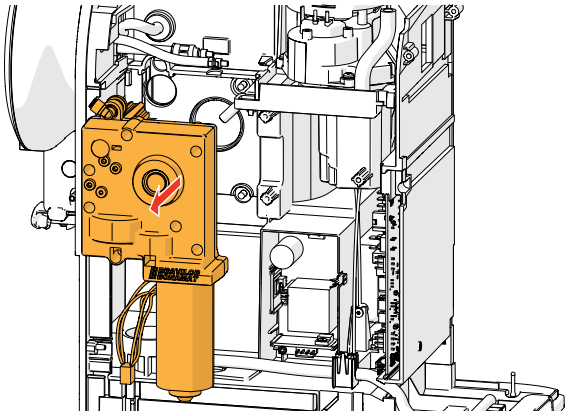
order of removal:
1. pump bracket, see section "2.11 Remove pump" on page 18
   » no need to disconnect the hoses
2. remove the 2 screws to disconnect the heater, see section "2.10 Remove flash heater" on page 17
   » no need to disconnect the hoses
3. remove the heater bracket (2 screws)
4. remove the bracket with valves, see section "2.12 Remove valve set" on page 19
   » only disconnect the hoses to the outlet and inlet of the brewer



Step 2
- remove the complete CIRCO brewer



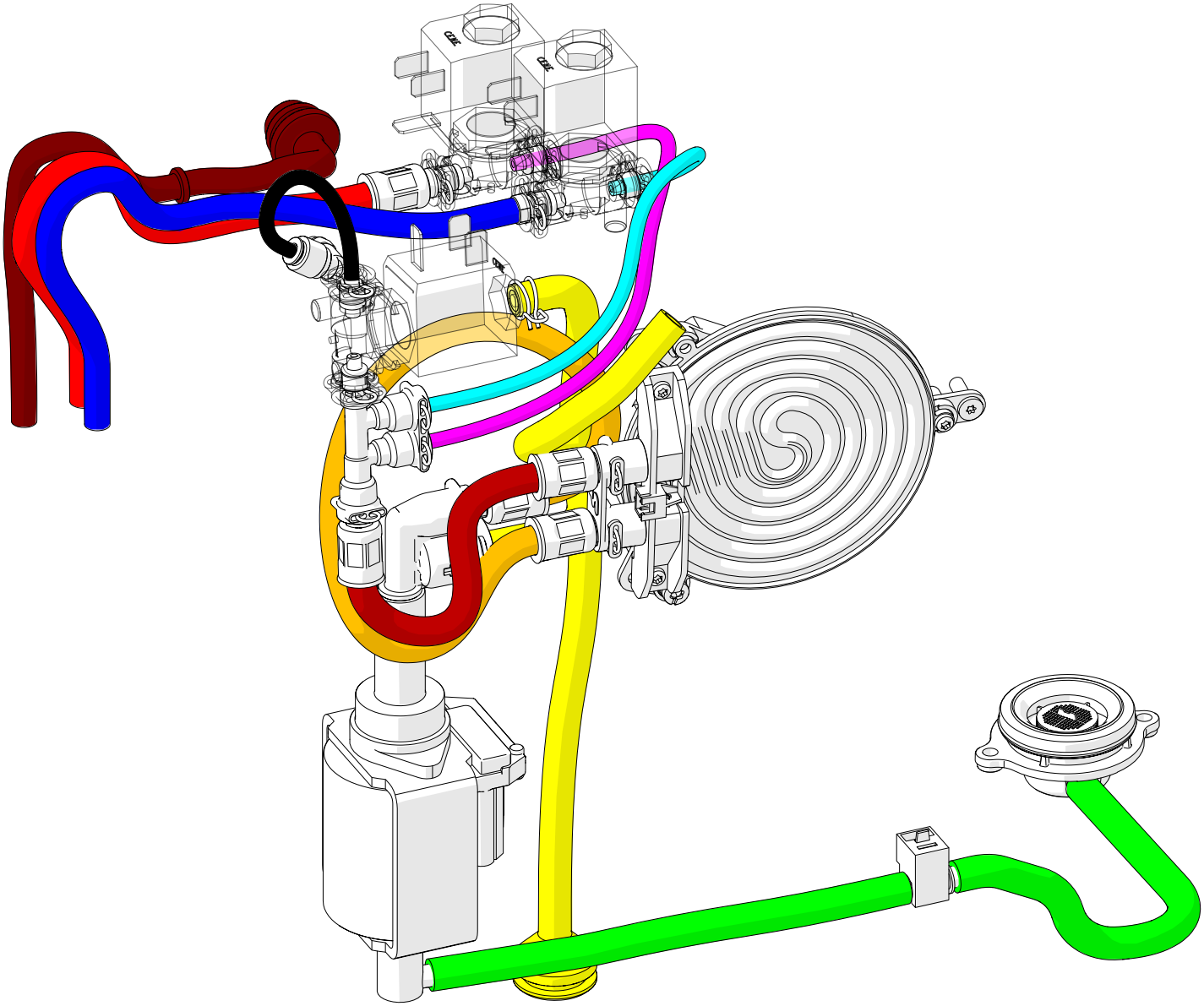
Step 3
- remove 4 screws



Step 4
- disconnect the wiring
- remove the brewer motor

2.14 Hose positions

► *The hoses may not touch the housing, this may cause resonance!*



3. Beverage profiles

Below is an overview of the small, medium and large volume of *standard Bravilor beverage profiles* 1, 2 and 3.

- ► *Some profiles are country or private label specifically and not mentioned in this manual.*
- ► *Variations may occur as grinders can react different to different types of coffee beans (e.g. dry beans vs. greasy beans).*
- ► *The gram weight is based on the middle position of the coffee grinder.*

strength

	1 bean	standard -1 gr.
	2 beans	= standard
	3 beans	standard +1 gr.

selectable volume

	small
	medium
	large

3.1 Profile 1: small volumes / strong coffee

3.1.1 Selectable volume - small

Beverage	Total beverage volume (ml)	1. Coffee volume (ml)	2. Milk volume (ml)	3. Hot water volume (ml)	(g)	(g)	(g)	Dosing order
Ristretto	15	15,0	x	x	7,5	**8,5**	9,5	x
Ristretto x2	30	30,0	x	x	14,0	**15,0**	16,0	x
Espresso	20	20,0	x	x	7,5	**8,5**	9,5	x
Espresso x2	40	40,0	x	x	14,0	**15,0**	16,0	x
Caffè crema	40	40,0	x	x	7,5	**8,5**	9,5	x
Caffè crema x2	80	80,0	x	x	14,0	**15,0**	16,0	x
Americano	80	20,0	x	60,0	7,0	**8,0**	9,0	1.-3.
Cappuccino	80	20,0	60,0	x	7,0	**8,0**	9,0	2.-1.
Cappuccino dark	80	20,0	60,0	x	7,0	**8,0**	9,0	1.-2.
Espresso macchiato	35	20,0	15,0	x	7,0	**8,0**	9,0	1.-2.
Latte macchiato	100	20,0	80,0	x	7,0	**8,0**	9,0	2.-1.
Caffè latte	100	50,0	50,0	x	7,0	**8,0**	9,0	1.-2.
Hot water	80	x	x	80,0	x	**x**	x	x
Hot milk foam	80	x	80,0	x	x	**x**	x	x

3.1.2 Selectable volume - medium

Beverage	Total beverage volume (ml)	1. Coffee volume (ml)	2. Milk volume (ml)	3. Hot water volume (ml)	(g)	(g)	(g)	Dosing order
Ristretto	20	20,0	x	x	9,5	**10,5**	11,5	x
Ristretto x2	40	40,0	x	x	14,0	**15,0**	16,0	x
Espresso	30	30,0	x	x	9,5	**10,5**	11,5	x
Espresso x2	60	60,0	x	x	14,0	**15,0**	16,0	x
Caffè crema	60	60,0	x	x	9,5	**10,5**	11,5	x
Caffè crema x2	100	100,0	x	x	14,0	**15,0**	16,0	x
Americano	100	30,0	x	70,0	9,0	**10,0**	11,0	1.-3.
Cappuccino	100	25,0	75,0	x	9,0	**10,0**	11,0	2.-1.
Cappuccino dark	100	25,0	75,0	x	9,0	**10,0**	11,0	1.-2.
Espresso macchiato	55	30,0	25,0	x	9,0	**10,0**	11,0	1.-2.
Latte macchiato	120	25,0	95,0	x	9,0	**10,0**	11,0	2.-1.
Caffè latte	120	60,0	60,0	x	9,0	**10,0**	11,0	1.-2.
Hot water	100	x	x	100,0	x	**x**	x	x
Hot milk foam	100	x	100,0	x	x	**x**	x	x

3.1.3 Selectable volume - large

Beverage	Total beverage volume (ml)	1. Coffee volume (ml)	2. Milk volume (ml)	3. Hot water volume (ml)	(g)	(g)	(g)	Dosing order
Ristretto	25	25,0	x	x	11,5	**12,5**	13,5	x
Ristretto x2	50	50,0	x	x	14,0	**15,0**	16,0	x
Espresso	40	40,0	x	x	11,5	**12,5**	13,5	x
Espresso x2	80	80,0	x	x	14,0	**15,0**	16,0	x
Caffè crema	80	80,0	x	x	11,5	**12,5**	13,5	x
Caffè crema x2	120	120,0	x	x	14,0	**15,0**	16,0	x
Americano	120	40,0	x	80,0	11,0	**12,0**	13,0	1.-3.
Cappuccino	120	30,0	90,0	x	11,0	**12,0**	13,0	2.-1.
Cappuccino dark	120	30,0	90,0	x	11,0	**12,0**	13,0	1.-2.
Espresso macchiato	75	40,0	35,0	x	11,0	**12,0**	13,0	1.-2.
Latte macchiato	140	30,0	110,0	x	11,0	**12,0**	13,0	2.-1.
Caffè latte	140	70,0	70,0	x	11,0	**12,0**	13,0	1.-2.
Hot water	120	x	x	120,0	x	**x**	x	x
Hot milk foam	120	x	120,0	x	x	**x**	x	x

3.2 Profile 2: average volumes / regular strength

3.2.1 Selectable volume - small 

Beverage	Total beverage volume (ml)	1. Coffee volume (ml)	2. Milk volume (ml)	3. Hot water volume (ml)	(g)	(g)	(g)	Dosing order
Ristretto	20	20,0	x	x	6,0	**7,0**	8,0	x
Ristretto x2	40	40,0	x	x	11,0	**13,0**	15,0	x
Espresso	30	30,0	x	x	6,0	**7,0**	8,0	x
Espresso x2	60	60,0	x	x	11,0	**13,0**	15,0	x
Caffè crema	100	100,0	x	x	6,0	**7,0**	8,0	x
Caffè crema x2	180	180,0	x	x	11,0	**13,0**	15,0	x
Americano	100	30,0	x	70,0	6,5	**7,5**	8,5	1.-3.
Cappuccino	100	30,0	70,0	x	6,5	**7,5**	8,5	2.-1.
Cappuccino dark	100	30,0	70,0	x	6,5	**7,5**	8,5	1.-2.
Espresso macchiato	45	30,0	15,0	x	6,0	**7,0**	8,0	1.-2.
Latte macchiato	120	30,0	90,0	x	6,0	**7,0**	8,0	2.-1.
Caffè latte	120	40,0	80,0	x	6,0	**7,0**	8,0	1.-2.
Hot water	100	x	x	100,0	x	**x**	x	x
Hot milk foam	100	x	100,0	x	x	**x**	x	x

3.2.2 Selectable volume - medium 

Beverage	Total beverage volume (ml)	1. Coffee volume (ml)	2. Milk volume (ml)	3. Hot water volume (ml)	(g)	(g)	(g)	Dosing order
Ristretto	25	25,0	x	x	7,0	**8,0**	9,0	x
Ristretto x2	50	50,0	x	x	13,0	**15,0**	16,0	x
Espresso	40	40,0	x	x	7,0	**8,0**	9,0	x
Espresso x2	80	80,0	x	x	13,0	**15,0**	16,0	x
Caffè crema	120	120,0	x	x	7,0	**8,0**	9,0	x
Caffè crema x2	200	200,0	x	x	13,0	**15,0**	16,0	x
Americano	120	40,0	x	80,0	7,0	**8,0**	9,0	1.-3.
Cappuccino	120	40,0	80,0	x	7,0	**8,0**	9,0	2.-1.
Cappuccino dark	120	40,0	80,0	x	7,0	**8,0**	9,0	1.-2.
Espresso macchiato	65	40,0	25,0	x	7,0	**8,0**	9,0	1.-2.
Latte macchiato	140	35,0	105,0	x	6,5	**7,5**	8,5	2.-1.
Caffè latte	140	50,0	90,0	x	7,0	**8,0**	9,0	1.-2.
Hot water	120	x	x	120,0	x	**x**	x	x
Hot milk foam	120	x	120,0	x	x	**x**	x	x

3.2.3 Selectable volume - large 

Beverage	Total beverage volume (ml)	1. Coffee volume (ml)	2. Milk volume (ml)	3. Hot water volume (ml)	(g)	(g)	(g)	Dosing order
Ristretto	30	30,0	x	x	8,0	**9,0**	10,0	x
Ristretto x2	60	60,0	x	x	15,0	**16,0**	16,0	x
Espresso	50	50,0	x	x	8,0	**9,0**	10,0	x
Espresso x2	100	100,0	x	x	15,0	**16,0**	16,0	x
Caffè crema	140	140,0	x	x	8,0	**9,0**	10,0	x
Caffè crema x2	220	220,0	x	x	15,0	**16,0**	16,0	x
Americano	140	50,0	x	90,0	7,5	**8,5**	9,5	1.-3.
Cappuccino	140	45,0	95,0	x	7,5	**8,5**	9,5	2.-1.
Cappuccino dark	140	45,0	95,0	x	7,5	**8,5**	9,5	1.-2.
Espresso macchiato	85	55,0	30,0	x	8,5	**9,5**	10,5	1.-2.
Latte macchiato	160	40,0	120,0	x	7,0	**8,0**	9,0	2.-1.
Caffè latte	160	60,0	100,0	x	8,0	**9,0**	10,0	1.-2.
Hot water	140	x	x	140,0	x	**x**	x	x
Hot milk foam	140	x	140,0	x	x	**x**	x	x