



### Materials

Component	C	B-C
Pump casing	Cast iron GJL 200 EN 1561	Bronze G-Cu Sn 10 EN 1982
Lantern bracket	Cast iron GJL 200 EN 1561	Bronze G-Cu Sn 10 EN 1982
Impeller	Brass P- Cu Zn 40 Pb 2 UNI 5705	
Shaft	Chrome steel AISI 430	Cr-Ni-Mo steel AISI 316
	Cr-Ni steel AISI 303 for C 41E	
Mechanical seal	Carbon - Ceramic - NBR	

### Construction

Close-coupled centrifugal pumps with open impeller.  
Free-flow impeller (vortex or recessed impeller) for type C 16/1E.  
C: version with pump casing and lantern bracket in cast iron.  
B-C: version with pump casing and lantern bracket in bronze  
(the pumps are supplied fully painted).

### Applications

For moderately dirty liquids or emulsions.  
For industry and agriculture.

### Operating conditions

Liquid temperature from -10 °C to +90 °C.  
Ambient temperature up to 40 °C.  
Total suction lift up to 8 m.  
Maximum permissible working pressure: 6 bar.  
Maximum size of solids: 4 mm.  
Continuous duty.

### Motor

2-pole induction motor, 60 Hz ( $n \approx 3450$  rpm).  
C: three-phase 220/380 V.  
CM: single-phase 220 V, with thermal protector.  
Capacitor inside the terminal box.

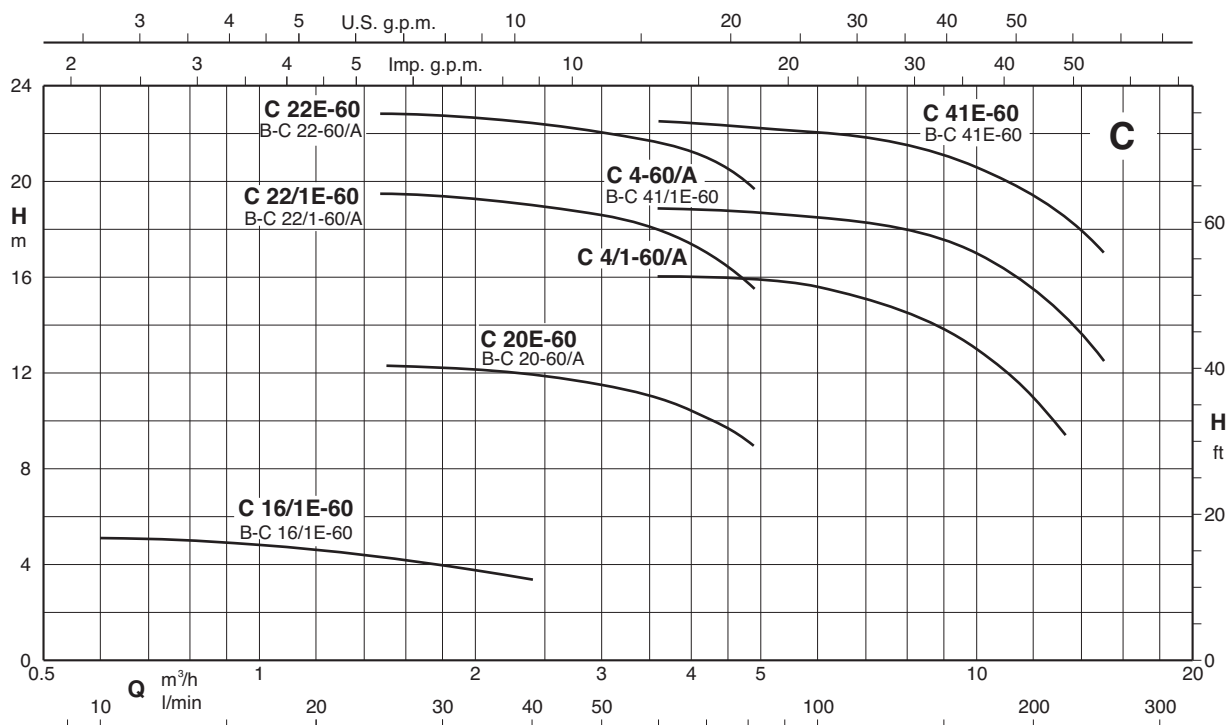
Insulation class F.  
Protection IP 54.

**Classification scheme IE2 for three-phase motors from 0,75 kW.**  
Constructed in accordance with: EN 60034-1; EN 60034-30.  
EN 60335-1, EN 60335-2-41.

### Special features on request

- Other voltages.
- Protection IP 55.
- Special mechanical seal
- Higher or lower liquid or ambient temperatures.
- Motor suitable for operation with frequency converter.

### Coverage chart $n \approx 3450$ rpm

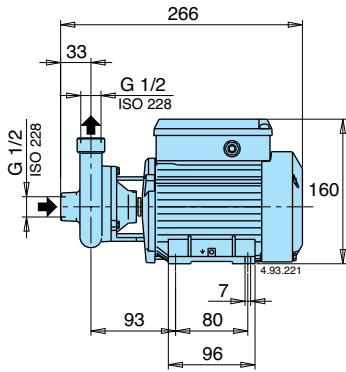


**Performance n ≈ 3450 rpm**

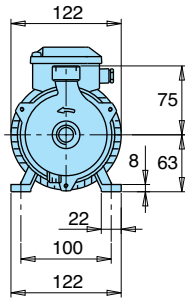
3 ~ 220V 380V				1 ~ 220V				P <sub>2</sub>		Q m <sup>3</sup> /h l/min																		
A	A	IA/IN		A	IA/IN	kW	HP		0,6		0,9	1,2	1,5	1,8	2,4	3	3,6	4,8	6	6,6	8,4	9,6	10,8	12	13,2	15		
<b>C 16/E-60</b> B-C 16/1E-60	2	1,2	4	<b>CM 16/E-60</b> B-CM 16/1E-60	1,5	2,7	0,15	0,2	<b>H</b> m	10	15	20	25	30	40	50	60	80	100	110	140	160	180	200	220	250		
<b>C 20E-60</b> B-C 20-60/A	2,3	1,3	3,5	<b>CM 20E-60</b> B-CM 20-60/A	3,1	2,5	0,37	0,5		5	4,7	4,4	4,2	4	3,3													
<b>C 22/1E-60</b> B-C 22/1-60/A	3	1,7	3,8	<b>CM 22/1E-60</b> B-CM 22/1-60/A	3,4	2,7	0,45	0,6					12,3	12,2	12	11,5	10,8	9										
<b>C 22E-60</b> B-C 22-60/A	3,5	2	4,5	<b>CM 22E-60</b> B-CM 22-60/A	4,3	2,6	0,55	0,75					19,5	19,4	19,1	18,7	17,9	15,3										
<b>C 4/1-60/A</b>	3,6	2,1	3,7	<b>CM 4/1-60/A</b>	5,2	3,1	0,55	0,75					22,5	22,5	22,4	22	21,5	19,5										
<b>C 4-60/A</b> B-C 41/1E-60	4,5	2,6	6,8	<b>CM 4-60/A</b> B-CM 41/1E-60	6,9	3,1	0,75	1										16	15,8	15,5	15,1	14,3	13,5	12,2	11	9,5		
<b>C 41E-60</b> B-C 41E-60	5,7	3,3	5,5	<b>CM 41E-60</b> B-CM 41E-60	8,5	3	1,1	1,5										19	18,8	18,5	18,3	17,7	17,2	16,5	15,5	14,4	12,5	
																	22,6	22,3	22,1	22	21,5	21	20,3	19,5	18,5	17		

P<sub>2</sub> Rated motor power output. B-C, B-CM = Bronze construction. ρ = Density 1000 kg/m<sup>3</sup>. Tolerances according to UNI EN ISO 9906:2012.  
IA/IN = D.O.L. starting current / Rated current. H Total head in m. υ = Kinematic viscosity max 20 mm<sup>2</sup>/sec.

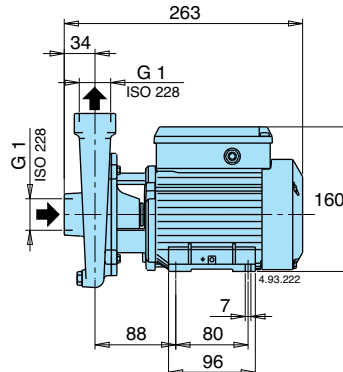
**Dimensions and weights**



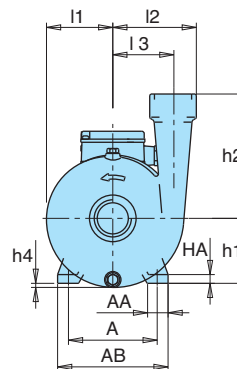
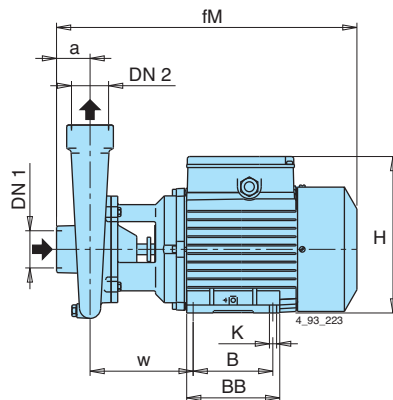
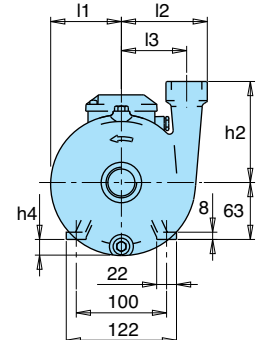
TYPE	kg
<b>C 16/E-60</b>	5,2
<b>CM 16/E-60</b>	5,2



TYPE	kg
<b>B-C 16/E-60</b>	5,6
<b>B-CM 16/E-60</b>	5,6

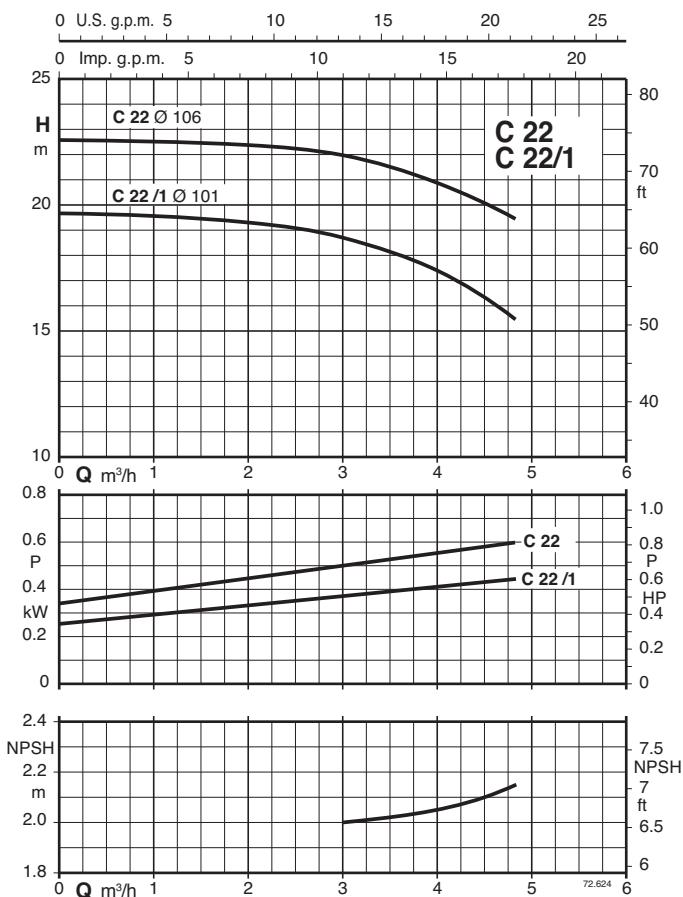
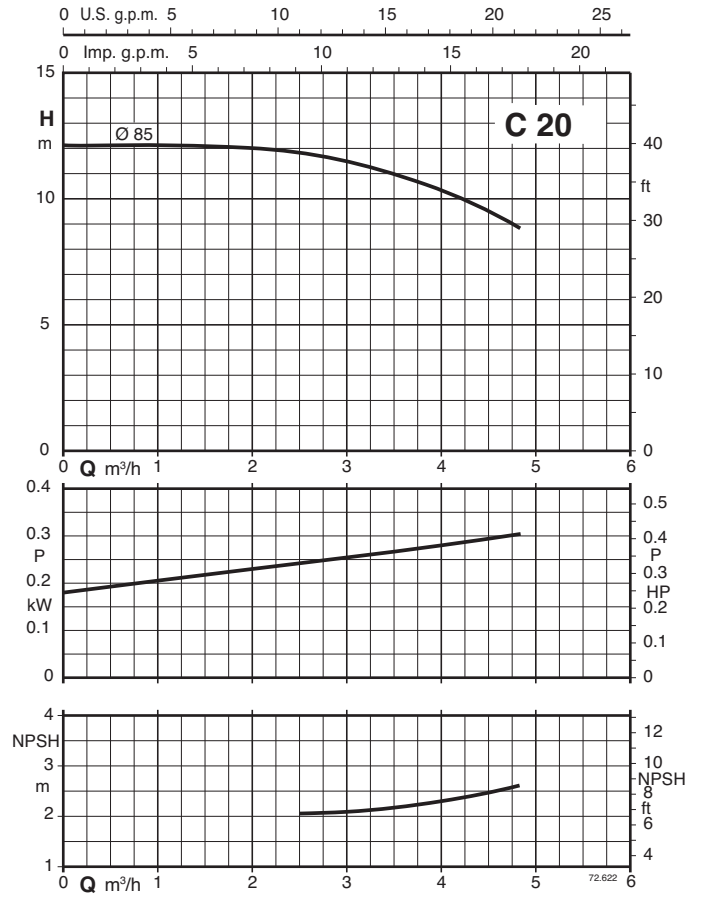
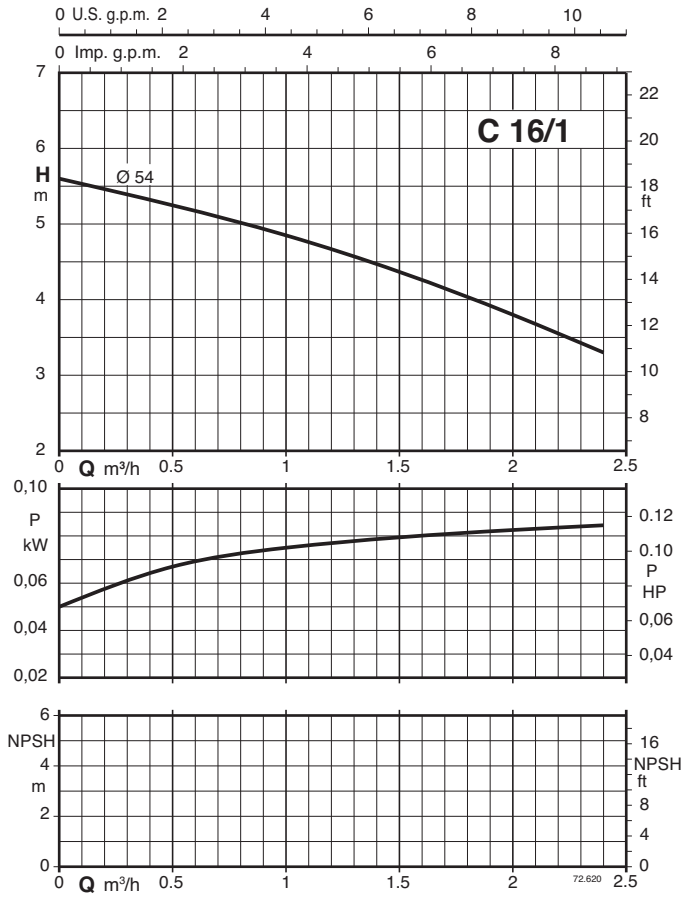


TYPE	mm					kg	
	h2	h4	l1	l2	l3	C	CM
<b>C 20E-60</b>	90	5	67	82	60	6,8	6,8
<b>C 22/1E-60 - C 22E-60</b>	110	17	77	94	71	8 - 8,3	8 - 8,3

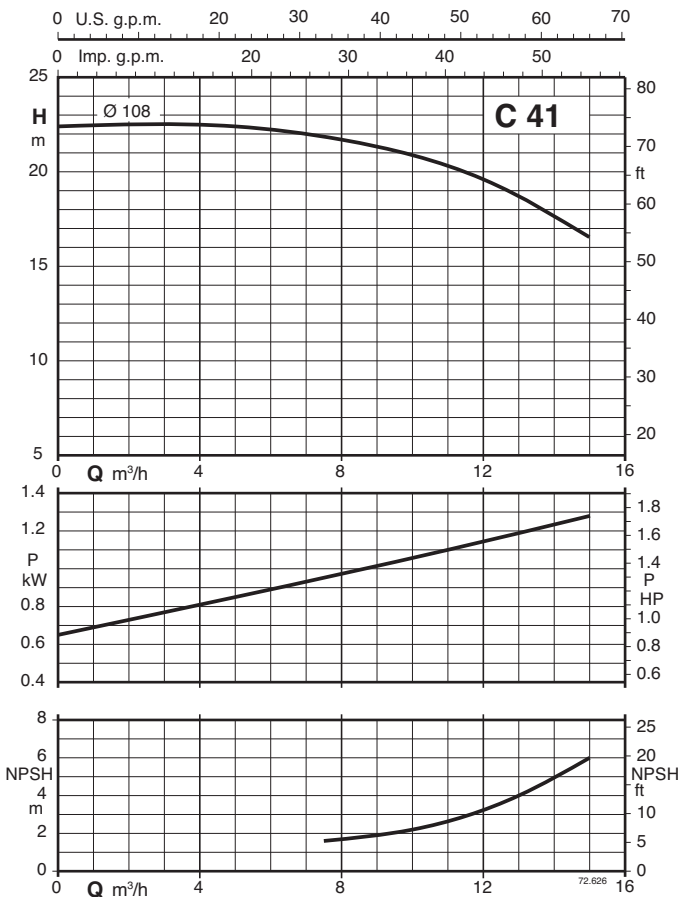
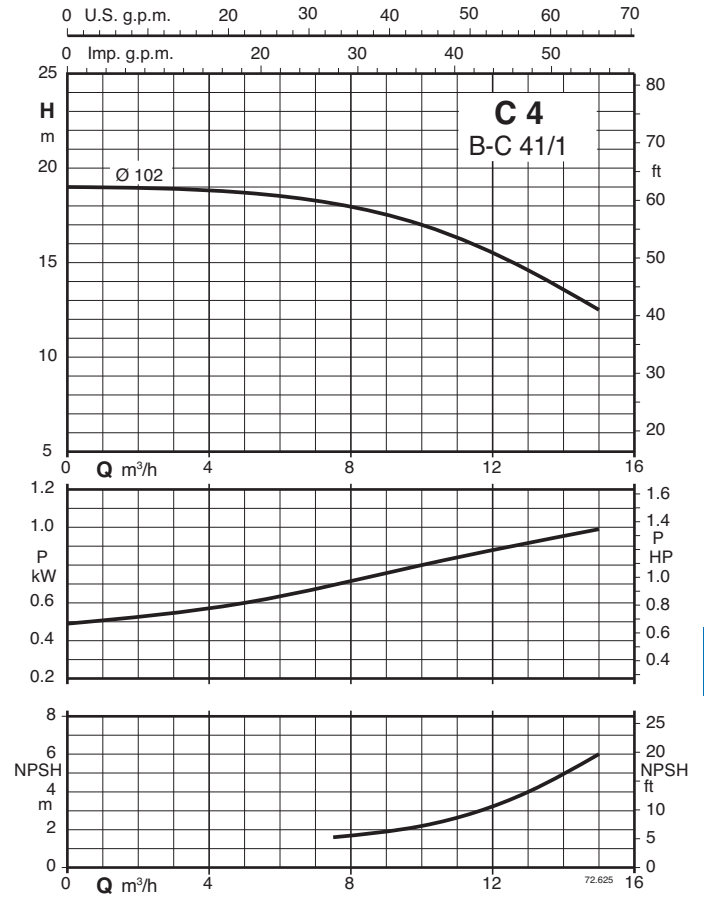
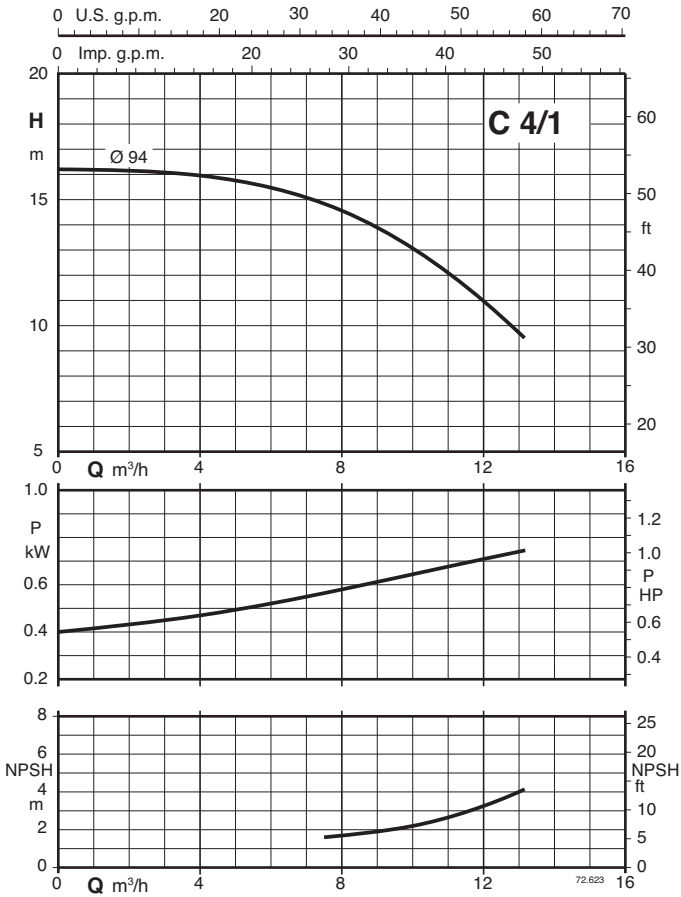


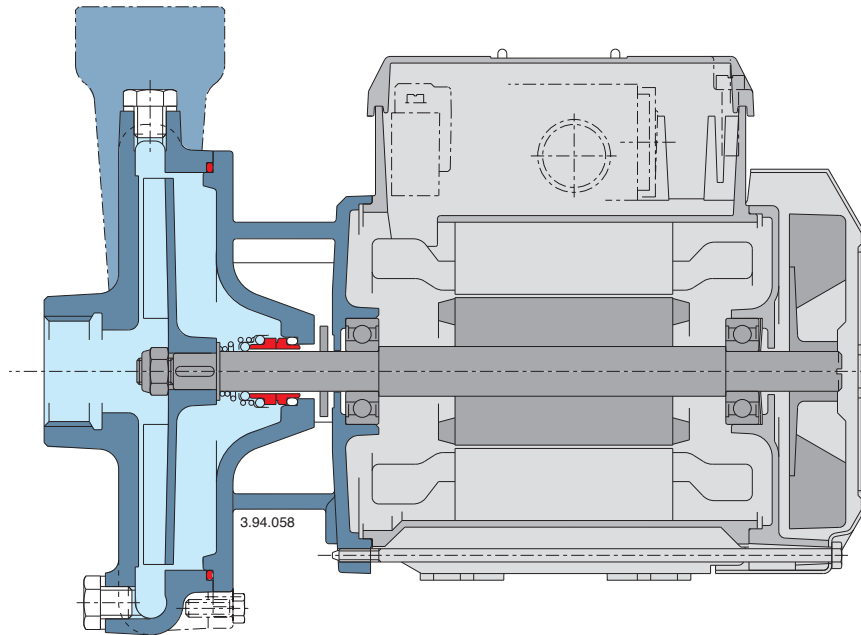
TYPE	DN1	DN2	mm																kg				
			ISO 228	a	fM	h1	h2	H	h4	BB	B	AB	A	AA	K	l1	l2	l3	w	HA	C	CM	B-C
- <b>B-C 20-60/A</b>	G 1	G 1	35	303	71	90	182	-	106	90	134	112	22	7	70	84	60	105	10	-	-	9,1	9,1
- <b>B-C 22/1-60/A</b> - <b>B-C 22-60/A</b>	G 1	G 1	35	303	71	110	182	9	106	90	134	112	22	7	81	93	71	106	10	-	-	9,3 9,6	10,3 10,6
<b>C 4/1-60/A</b> - <b>C 4-60/A</b>	G 1 1/2	G 1 1/2	43	304	71	160	182	18	106	90	134	112	22	7	85	108	78	100	10	10,8 11,8	11,8 12,8	- -	- -
- <b>B-C 41/1E-60</b> <b>C 41E-60</b> - <b>B-C 41E-60</b>	G 1 1/2	G 1 1/2	43	380	80	160	208	9	125	100	155	125	30	9,5	85	108	78	132	10	- 18,5	- 19,3	16,3 19,2	17,9 20,1

**Characteristic curves n ≈ 3450 rpm**



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**Features****Flexibility**

The option to choose between cast iron and bronze materials for the hydraulic parts in contact with the pumped liquid allows C series pumps to be selected for use with different types of liquids.

**Solid parts**

The open impeller allows for the passage of suspended solids in pumped liquid.

**Reliability**

The bearing and shaft are designed to ensure the reduction of the stress, providing high reliability under all operating conditions.