

NCU-GC

HORIZONTAL, CENTRIFUGAL PUMPS WITH RUBBER LINING



APPLICATION

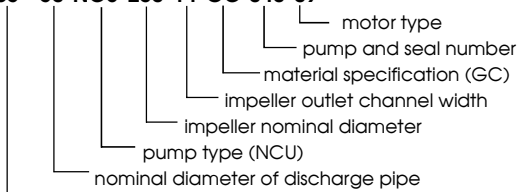
- NCU-GC – type pumps are designed to pump chemically active and corrosive liquids (hydrochloric acid, fluor-silicic acid, hydrofluoric acid, ferric chloride, zinc chloride, ferric perchlorate, etc.)
- chemical industry

WORKING CONDITIONS

- medium temperature from 0 °C to +80 °C (GC)
- working pressure of 10 bars
- medium density from 1000 kg.m⁻³ to 1900 kg.m⁻³
- kinematic viscosity up to 75 mm².s⁻¹
- pH 0-14
- content of solid particles up to 3% of weight
- particle size up to 0,25 mm

TYPE IDENTIFICATION

65 - 50-NCU-230-14-GC-040-09



CONSTRUCTION

- NCU GC series contain 4 sizes of hydrodynamic pumps
- horizontal, centrifugal, single-stage, volute- type construction with an axial intake and radial outlet
- hydraulic part contains of stator and rotor; stator forms suction cover with drain opening and volute case with discharge pipe; rotor forms shaft with open impeller made of chemically resistant rubber vulcanized on a steel pad
- volute and suction cover is made of cast iron with chemically resistant rubber lining, impeller is made of rubber, vulcanized
- stainless steel shaft is in packing space protected by sleeve made from material resistant to pumped liquid
- mechanical part contains self-supporting bearing support with shaft in roller bearings and oil lubrication; to set required clearance between the front of impeller and suction cover is designated the nut in front of rear bearing, accessible by rectangular mounting hole on the top of bearing support and nut behind the rear bearing is accessible under rear bearing cover
- special design – anti-abrasion treatment

MATERIAL SPECIFICATION

Part name	GC
volute, suction cover	EN-GJL-200+rubber
stuffing box	EN-GJL-200+rubber
impeller	rubber
seal housing	*
pump shaft	stainless steel
lantern	EN-GJL-200
bearing support	EN-GJL-200

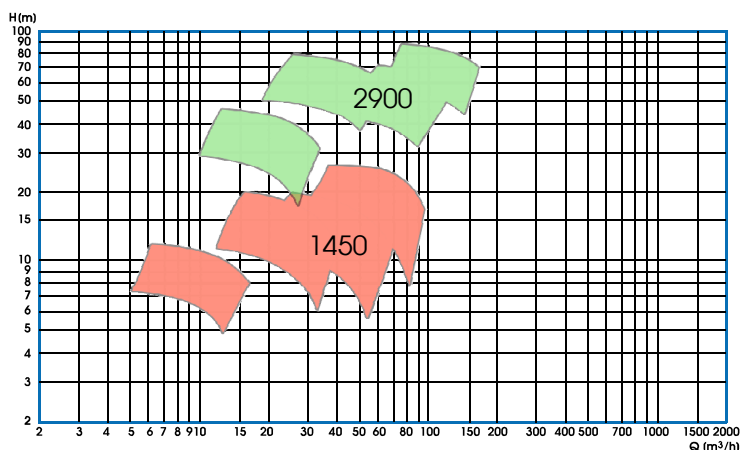
*material resistant to pumped liquid
PP polypropylene



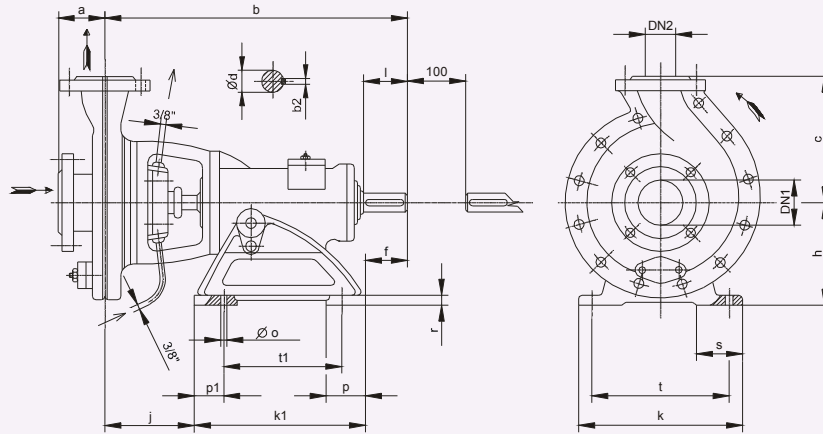
NCU-GC

WORKING AREA

Pump size	Shaft speed (min ⁻¹)	Flow Q (l/s)	Delivery head H (m)	Temperature max (°C)
from 40-32-NCU-175 to 100-100-NCU-265	1450 2900	from 1,5 to 45	from 6 to 90	80 (GC)

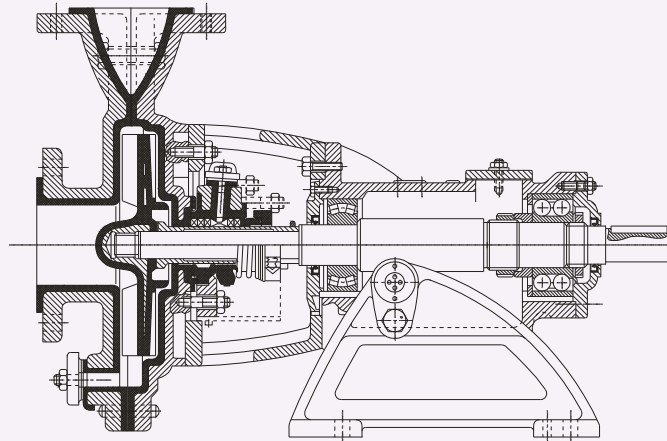


BASIC DIMENSIONS



Area	DN1	DN2	Ø Impeller	Pump								Feet								Shaft			kg
				a	b	h	c	f	j	t1	k1	t	k	Ø o	r	s	p	p1	l	d	b2		
1	40	32	175	110	486	160	180	55	186	225	270	190	230	14	15	65	60	22,5	50	28	8	52	
2	65	50	230	100	594	200	220	65	249	250	340	210	250	14	18	60	70	60	70	40	12	95	
3	80	80	230	100	598	200	250	65	253	250	340	210	250	14	18	60	70	60	70	40	12	105	
4	100	100	265	125	758	280	300	95	263	360	440	310	360	23	22	80	90	40	90	50	14	170	

CROSS-SECTION DRAWING



SEAL DESIGN

- Soft cord packing
- single mechanical seal, cartridge type
- double mechanical seal, cartridge type
- outer single seal
- single mech. seal QUENCH

MOTORS

- foot-mounted electric motor drive
- driving force is transmitted using a flexible coupling with space
- common base plate assembly, cast iron