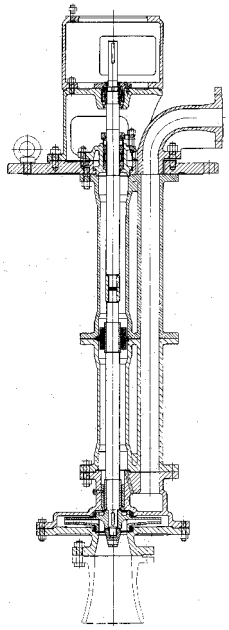
CTN



Chemical Shaft-Driven Sump Pump

Automation products available:

- Hyamaster
- hyatronic

Fields of Application

CTN
For handling chemically aggressive liquids, also slightly contaminated or with a low solids content.
CTN pumps can be used in the chemical and petrochemical industry.

CTN-H
For handling liquids which can only be pumped when warm or hot.

Design

Vertical, radially split shaft-driven sump pump with double volute casing, in wet or dry installation; radial impeller, single-flow, single- and double-stage. The shaft seal is not in contact with the pumped product.

Designation

CTN - C 40 - 200

- Type series
- Material of wetted components
- Discharge nozzle DN
- Nominal impeller diameter in mm

Operating Data

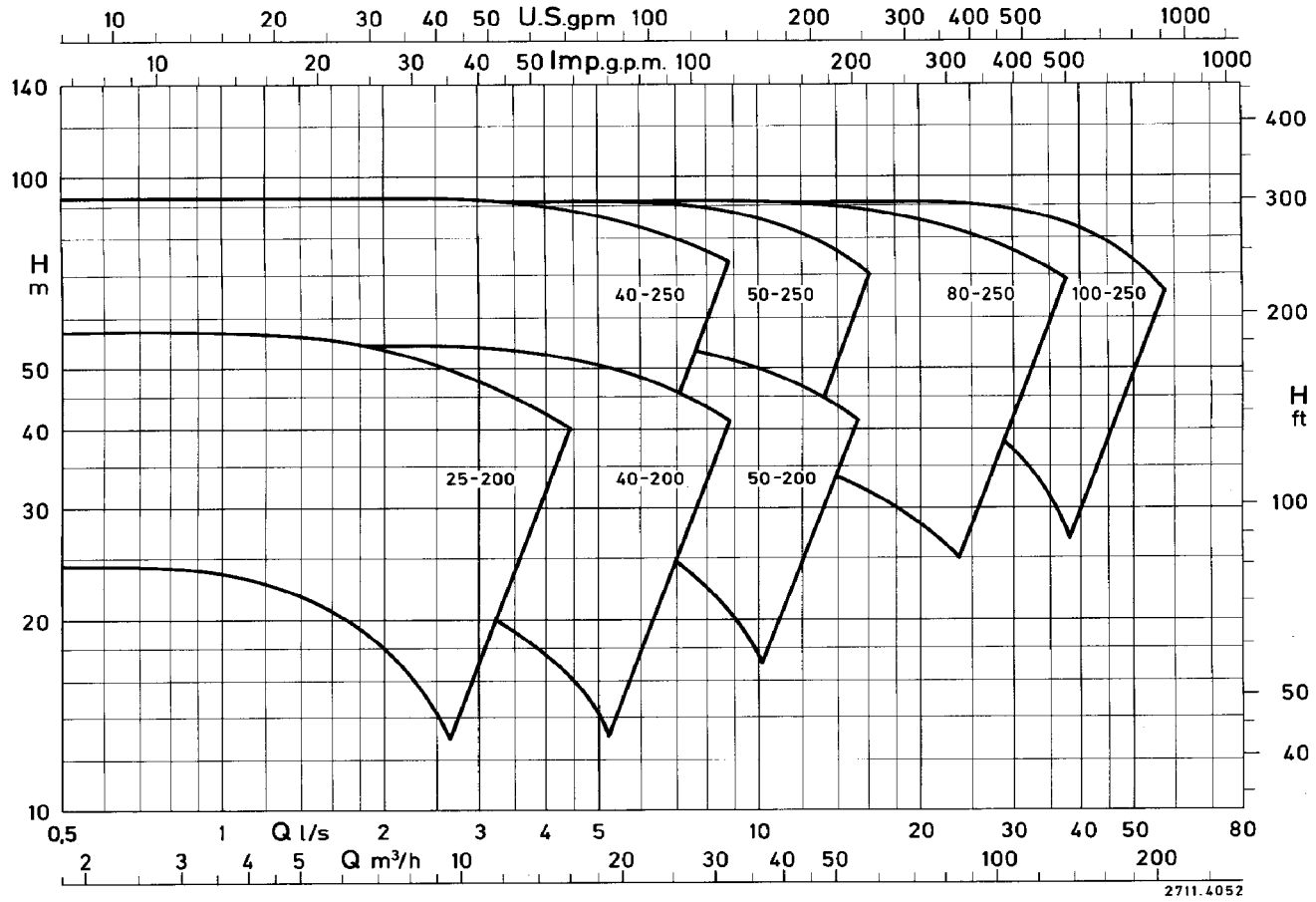
Capacities	Q	up to 220 l/s (800 m^3/h)
Heads	H	up to 93 m
Pump sizes	DN	25 to 250
Operating pressures	p_2	up to 16 bar
Operating temperatures	t	-70 °C to +300 °C

Certification

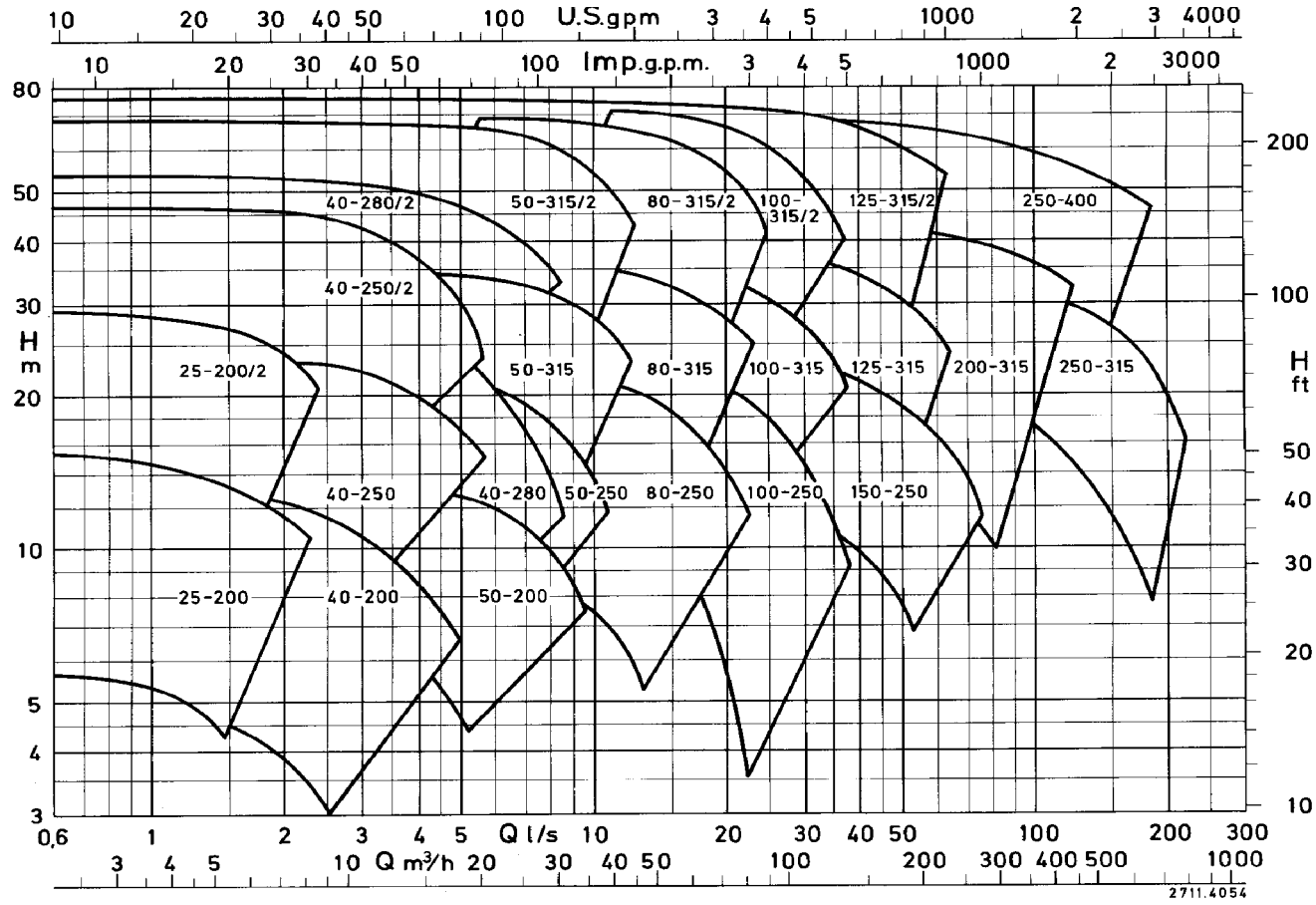
Certified quality management ISO 9001.

Selection Charts

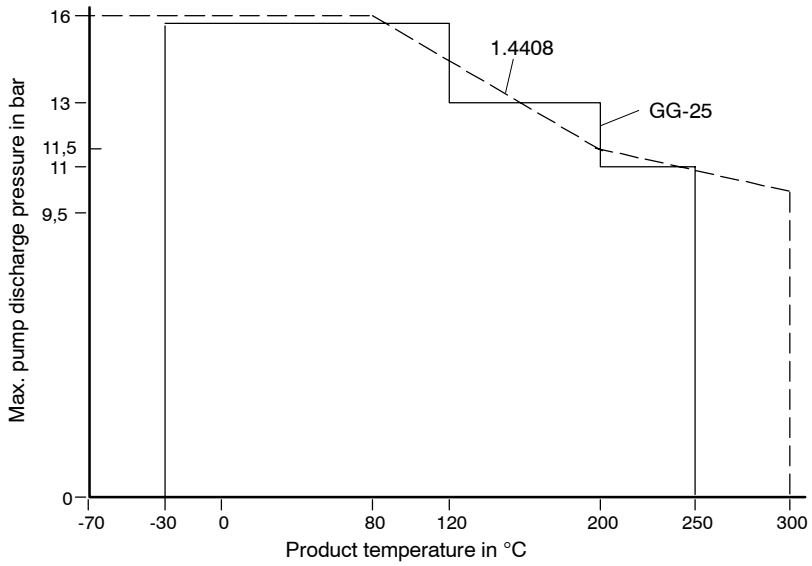
n = 2900 1/min



n = 1450 1/min



Pressure and Temperature Limits



Materials

Part No.	Description	**CTN/CTN-H**	
		Material G	Material C
102	Volute casing	JL1040 [5]	1.4408
108	Stage casing	JL1040 [5]	1.4408
153	Suction nozzle	JL1040 [5]	1.4408
162	Suction cover	JL1040 [5]	1.4408
210	Shaft	C45SH+S	1.4571SH
230	Impeller	JL1040 [5]	1.4408
341	Motor stool	JL1040 [5]	JL1040 [5]
344	Bearing bracket lantern	JL1040 [5]	JL1040 [5]
350.04	Guide bearing housing [3]	JL1040 [5]	1.4408
452.02	Gland cover	C22+N	1.4571
454.02	Stuffing box ring	1.4571	1.4571
458.02	Lantern ring	1.4571	1.4571
502.01 bis .04	Casing wear ring	JL1040 [5]	–
529.01/.03	Bearing sleeve	1.4122+QT750	1.4571
545.01/.03	Bearing bush	Carbon [4]	Carbon [4]
71-9.01/.02	Pipe assembly	JL1040 [2] [5]	1.4571/1.4408
72-1	Flanged elbow	JL1040 [2] [5]	1.4408 [2]
852	Threaded coupling	1.4021+QT750	1.4571
893.02	Soleplate	JL1040 [5]	JL1040 [5]
	Nuts and bolts	5.6	A4

1) if only one shaft is fitted: for larger installation depths the shaft assembly consists of pump shaft and drive shaft or of pump shaft, intermediate shaft(s) and drive shaft
2) on CTN-H: material variant G = St35; C = 1.4571
3) not applicable to CTN-H
4) standard version: other materials possible, depending on pumped liquid
5) to EN 1561

Benefits at a Glance

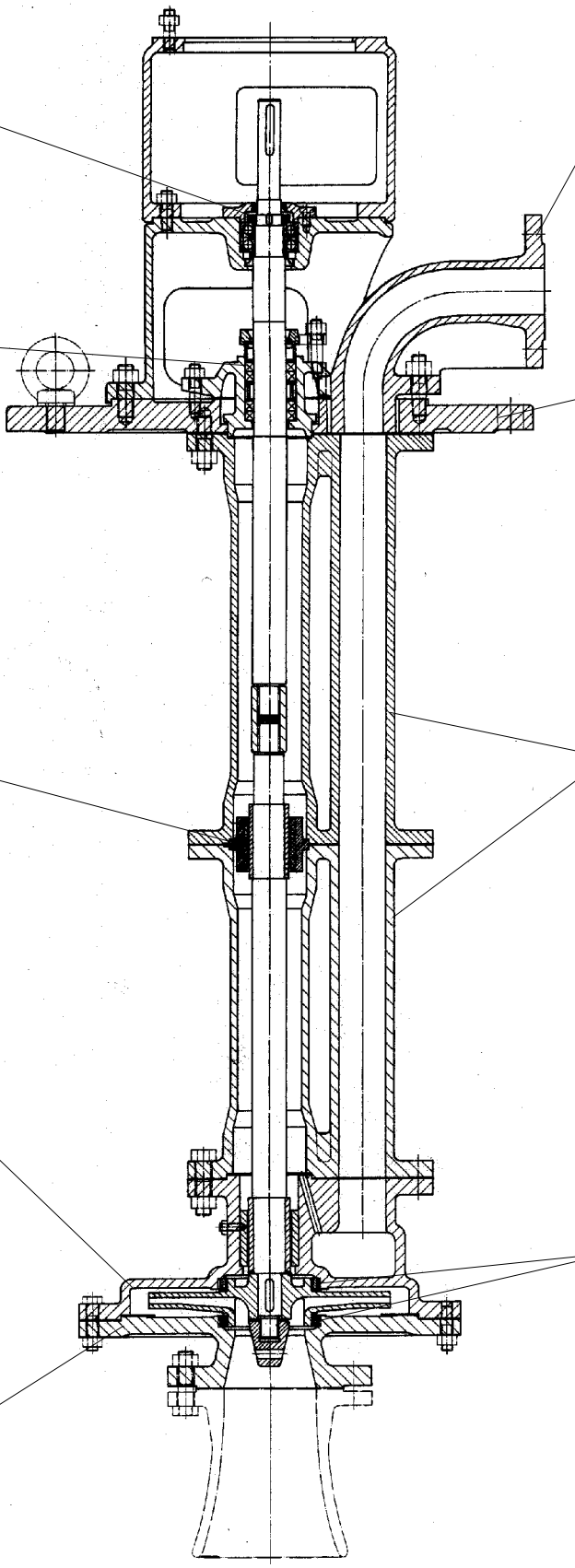
Thrust bearing
little axial movement of the rotor; held in position by the shaft nut. Rotor adjustable on mounted pump

Shaft seal
not in contact with the pumped product, gland packing or mechanical seal possible

Plain bearings
adapted to operating conditions, product-lubricated

Double volute
reduces load on the plain bearings

Pressure-retaining components
selected in well-proven calculation procedure, manufactured as quality casting with corrosion allowance



Discharge pipe
raised above the soleplate, easy and quick installation without draining the tank

Soleplate
round, interchangeable among certain pump sizes, odour- and gasproof soleplate design possible

Installation depth
variable by combining different quantities of pipe assemblies (modular design system)

Casing wear rings
replaceable (in material variant GG)

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