

Application

Vertical centrifugal pumps, approved in design and certified, are applied as tank installation pumps in areas with explosion hazard.

Equipped with special safety devices these pumps fulfill the requirements for pumping explosive and toxic liquids.

As standard types the pumps are suited for pumping condensate or water.

Depending on the liquid to be pumped, the pump material can be ductile iron, cast steel, stainless steel, bronze or cast iron.

Main application:

- tank installations
- chemical industry and process technology
- condensate installations
- pumping service and drinking water out of reservoirs

Operating data

Flow	max. 500 m ³ /h [*])
Head	max. 250 m
Temperature	< 110 °C ^{**)}
Case pressure	PN 10/16, 25 bar ^{***)}
Nominal diameter	DN 32 to 200

^{*}) Bigger flow upon request.

^{**)} Higher temperatures upon request.

^{***)} Depending on operating conditions.

Designation

	GLV - 32B/10-100/TN-0000
Series	GLV
Nominal diameter	32
Hydraulics	B
Number of stages	10
Material code	TN
Shaft sealing	0
Installation depth	0000

Shaft sealing

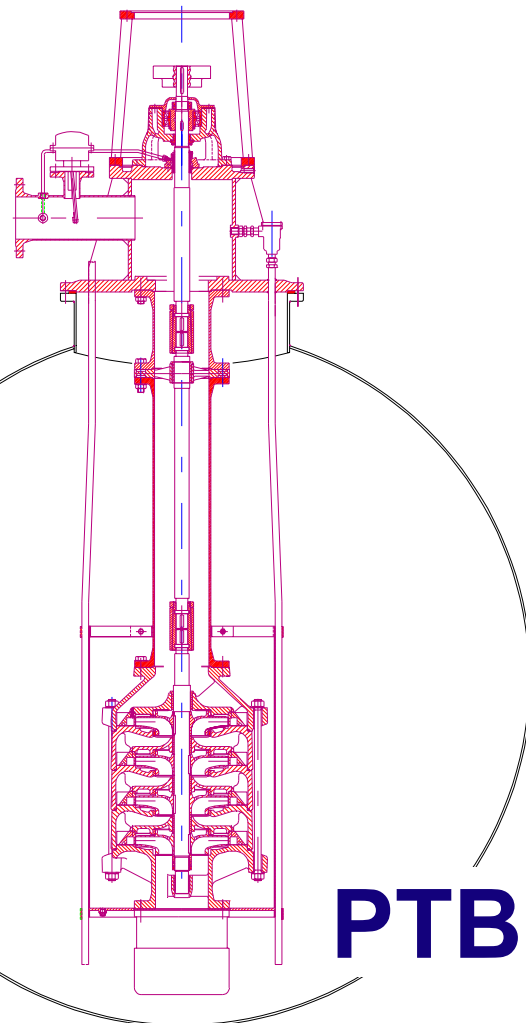
- single and double mechanical seal
- magnetic drive
- packing gland

Bearings

- oil and grease-lubricated antifriction bearings
- liquid-lubricated sliding bearing (material depending on liquid)

Control system

If required, the pumps can be equipped with speed regulator and control system including remote process data transmission.



Design

Pumps of the GLV series are multistage, vertical, radial-flow pumps for wet well installation with closed impeller and lantern with flange motor.

Using standard intermediate pipes and shafts, installation depths up to 10 m can be realized. Greater depths are possible upon request.

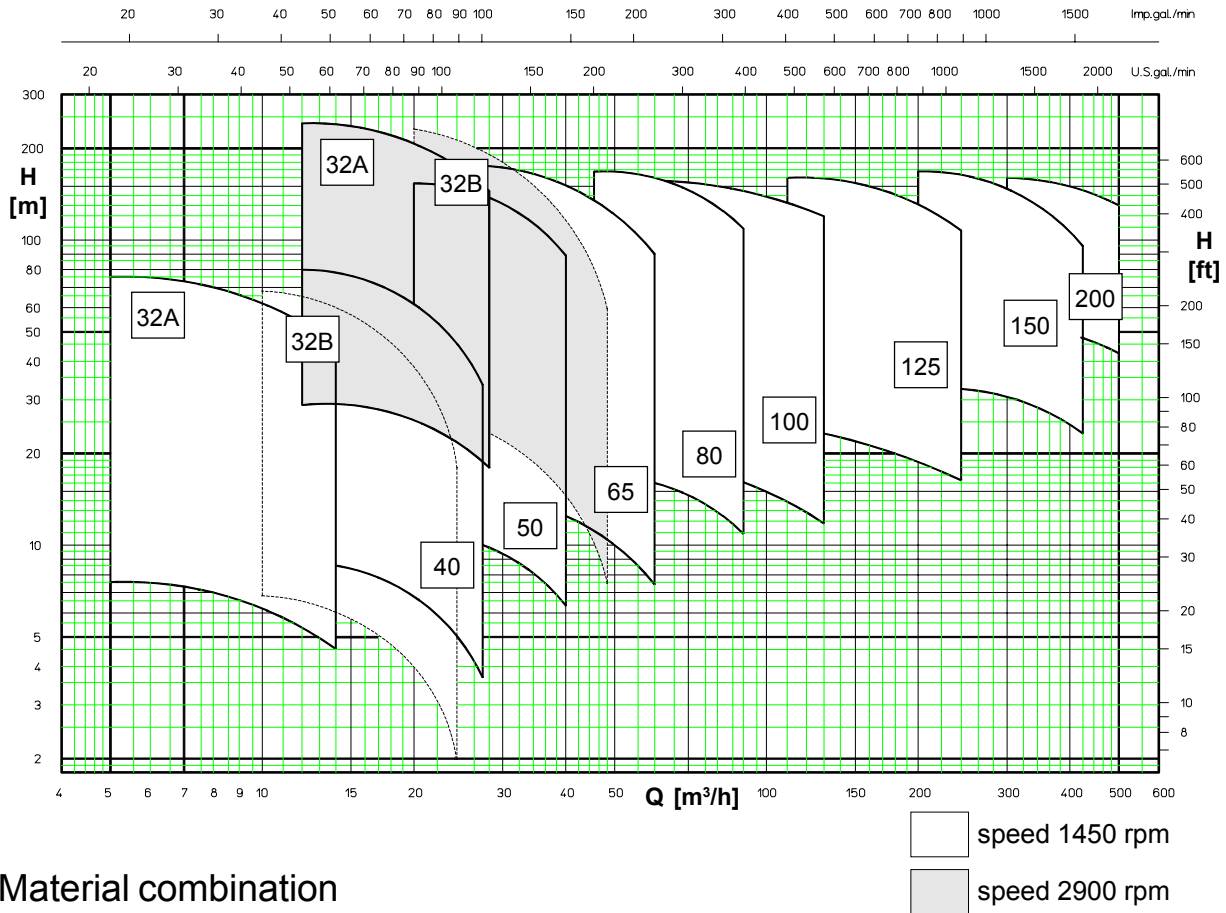
The power is transmitted from the drive over the intermediate shafts guided in product-lubricated sliding bearings to the pump shaft.

The individual shafts are connected to each other by means of special couplings.

Drive

The pump is driven by a motor of the Ex e, EEx d or IEC standard type.

Performance chart



Material combination

	DIN				
	013	100	508	800	821
Outlet case	0.6025	0.7040	1.4408	1.0038	1.0038
Suction and disch. cover	0.6025	0.7040	1.4408	0.7040	0.6025
Stage case	0.6025	0.7040	1.4408	0.7040	0.6025
Impeller	0.6025	0.6025	1.4408	0.6025	0.6025
Diffuser	0.6025	0.6025	1.4408	0.6025	0.6025
Shafts	1.7225	1.7225	1.4057	1.7225	1.7225
Stage sleeve	2.1090.01	0.6676	1.4571	0.6676	0.6676
Wear ring	2.1090.01	0.6676	1.4138	0.6676	0.6676
Shaft sleeve (mech. seal)	1.4571	1.4571	1.4571	1.4571	1.4571
Shaft protection sleeve	2.1090.01	0.6676	1.4571	0.6025	0.6676
Bearing bush	2.1090.01	2.1090.01	Kohle	2.1090.01	Carbon
Shaft sealing	Packing or mechanical seal are selected depending on the liquid.				

Material combinations that are not included in the list can be made available upon request.

The sliding bearing material (such as bronze, carbon, silicon carbide) is selected depending on the liquid.

Explosion protection

The multi-stage centrifugal pumps of the GLV series were approved in design and certified by the German Physikalisch-Technische Bundesanstalt Braunschweig (Physico-Technical Federal Institute in Braunschweig) (PTB). They fulfill the requirements of the Instructions for the Use of Combustible Liquids (VbF) and the Technical Rules for Combustible Liquids (TRbF).

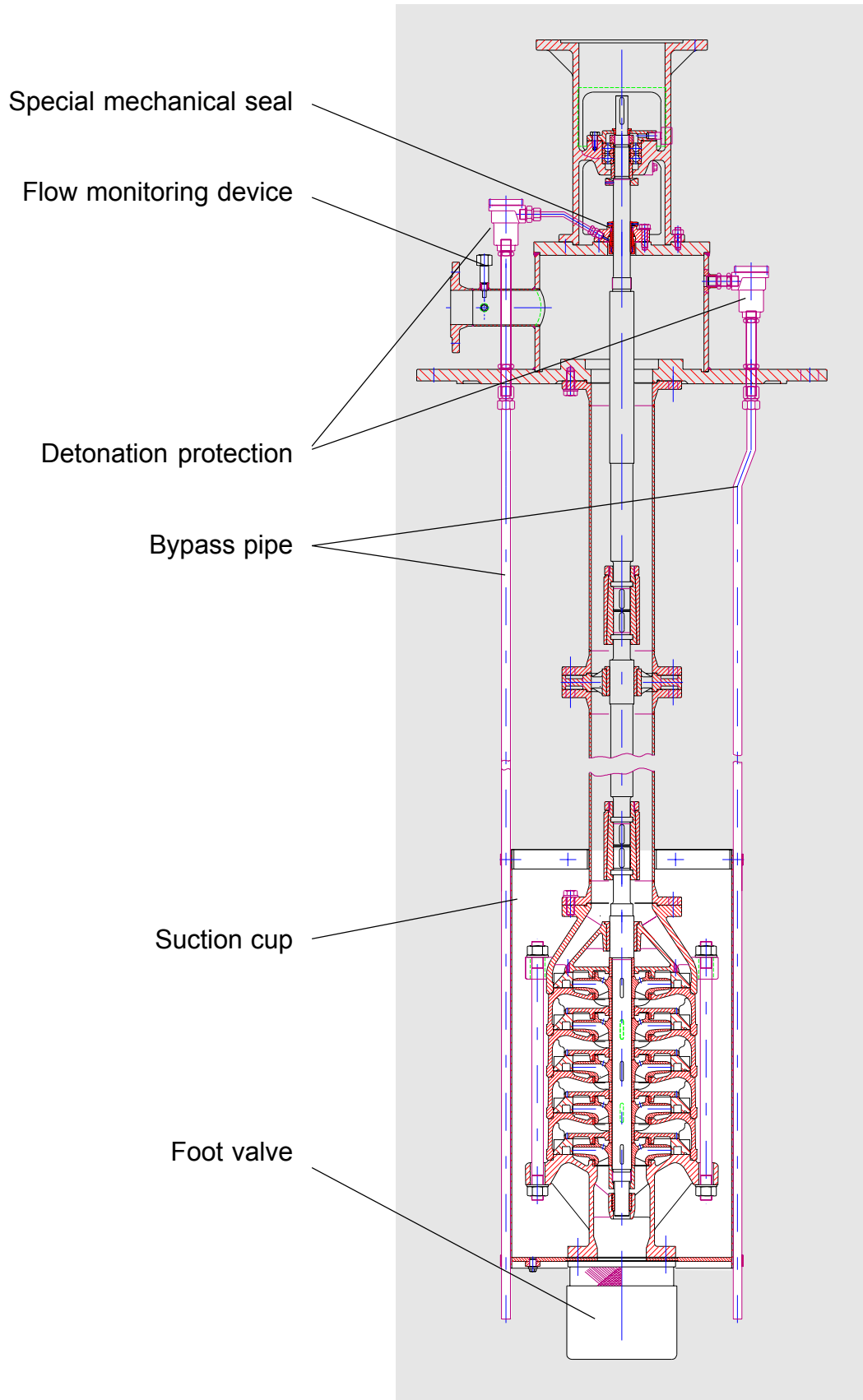
The pump disposes of safety devices such as:

- flow monitoring device
- detonation protection
- foot valve
- suction cup

that, in case of an average, prevent an explosion or deflagration from extending into the tank.

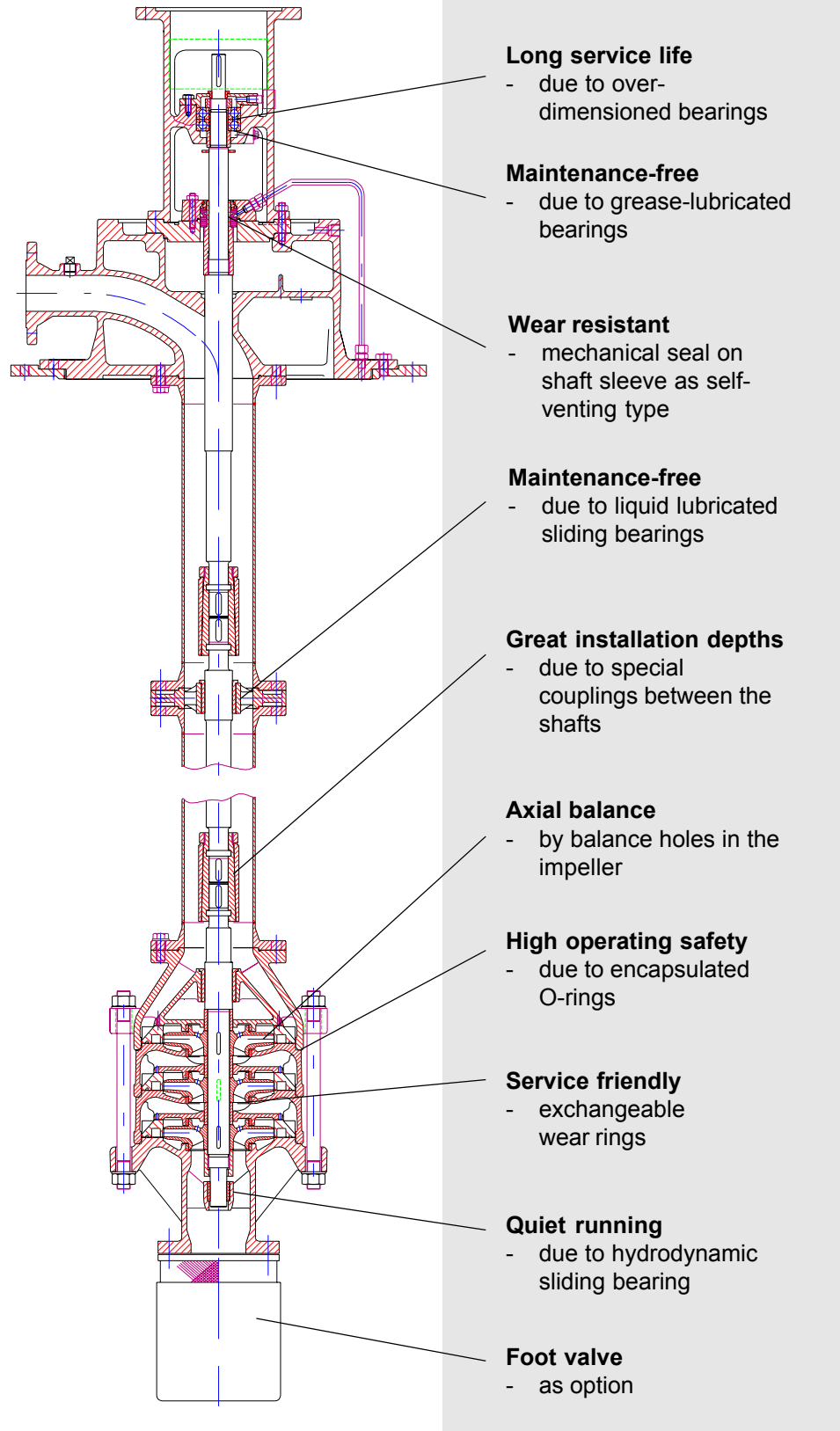
GLV

Design approved and certified tank installation pump with safety devices



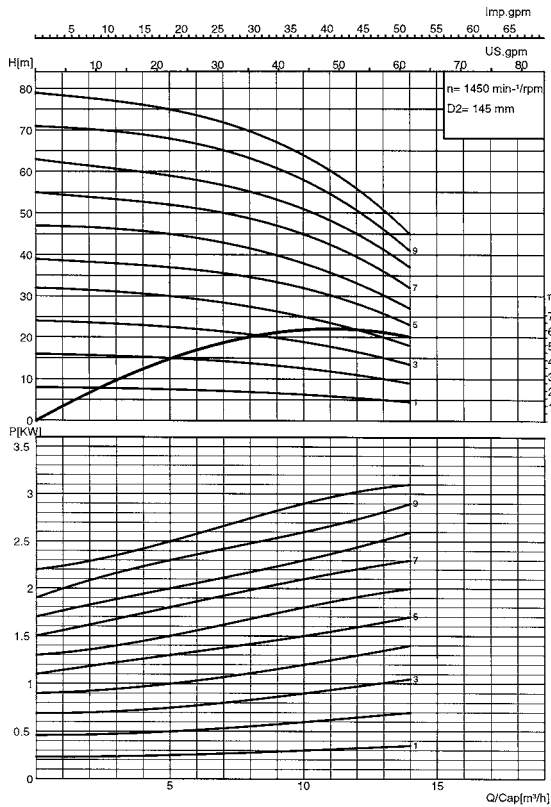
GLV

Tank installation pump for universal application

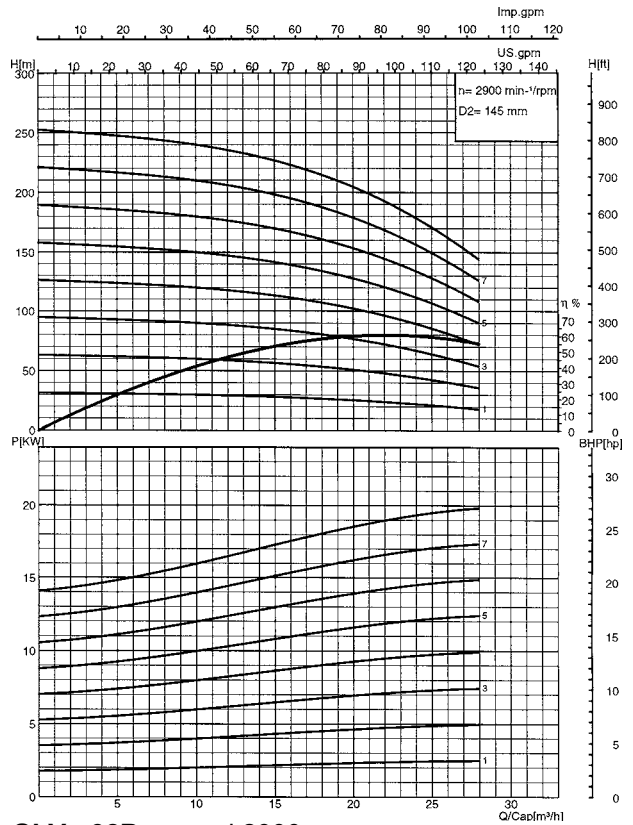


Performance curve

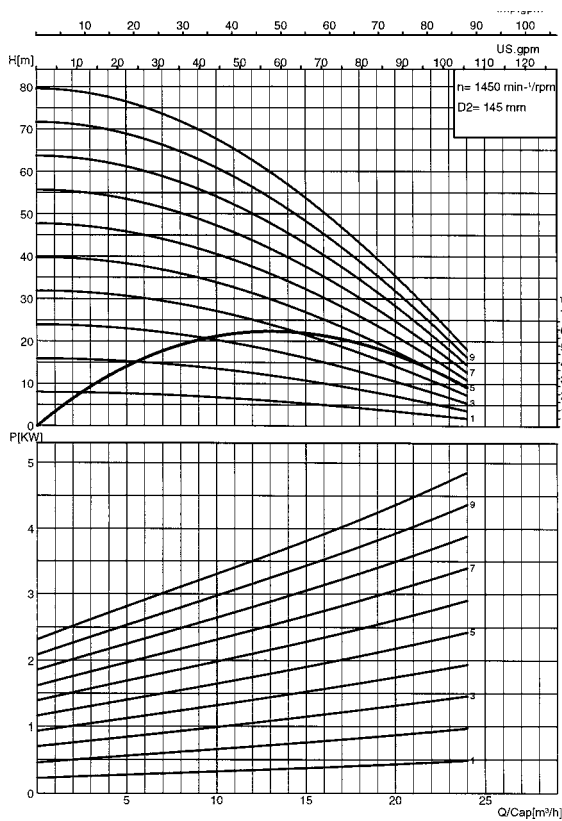
GLV - 32A speed 1450 rpm



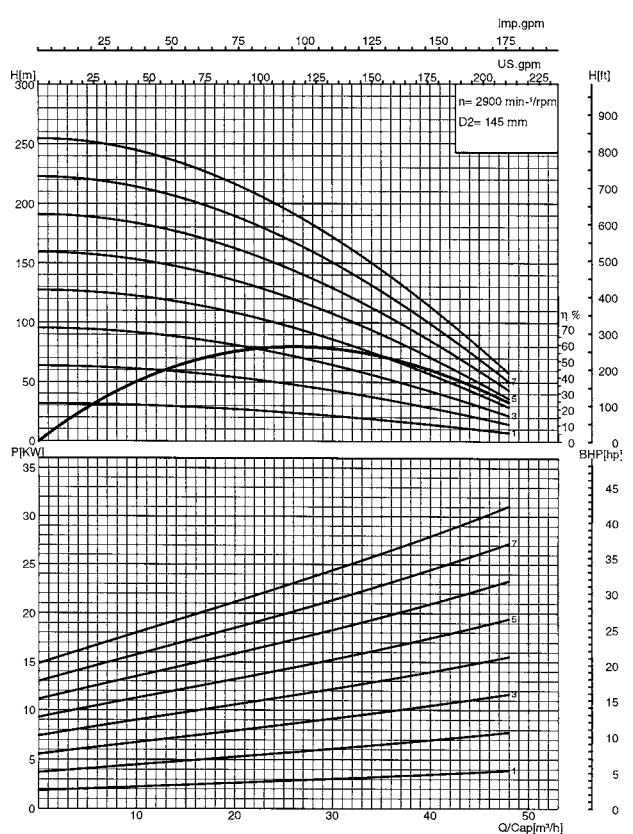
GLV - 32A speed 2900 rpm



GLV - 32B speed 1450 rpm

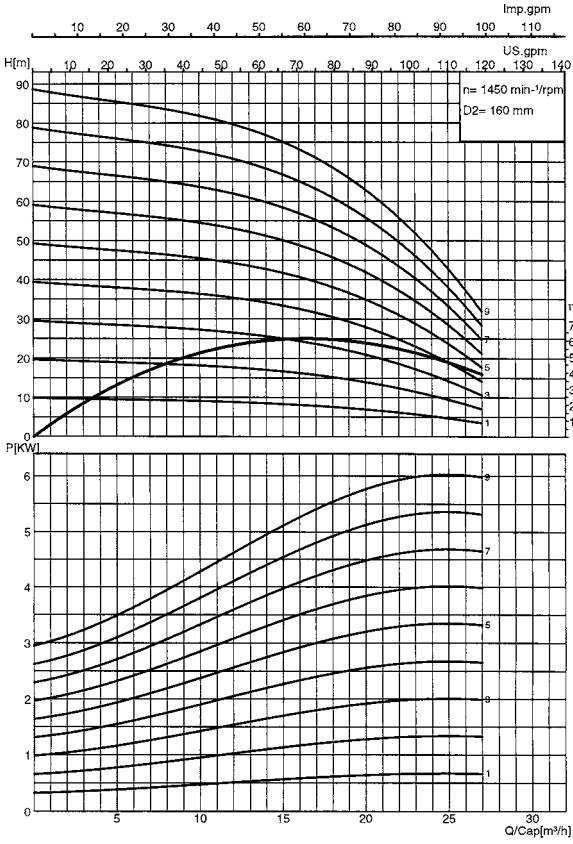


GLV - 32B speed 2900 rpm

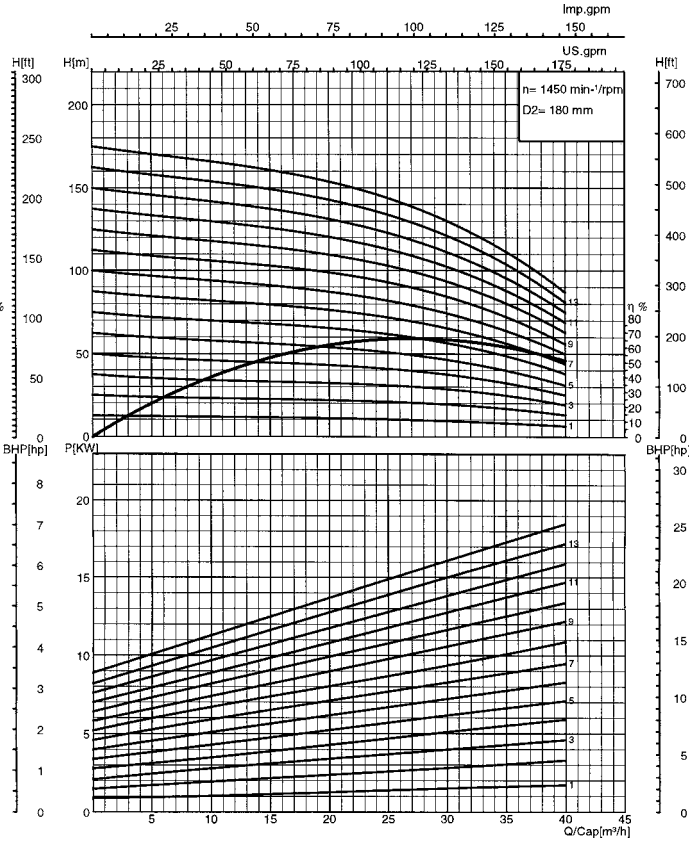


Performance curve

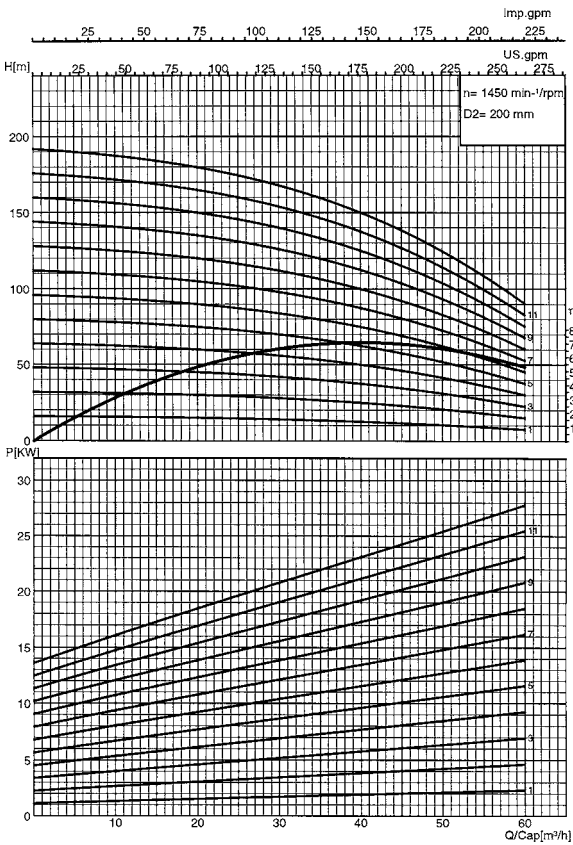
GLV - 40 speed 1450 rpm



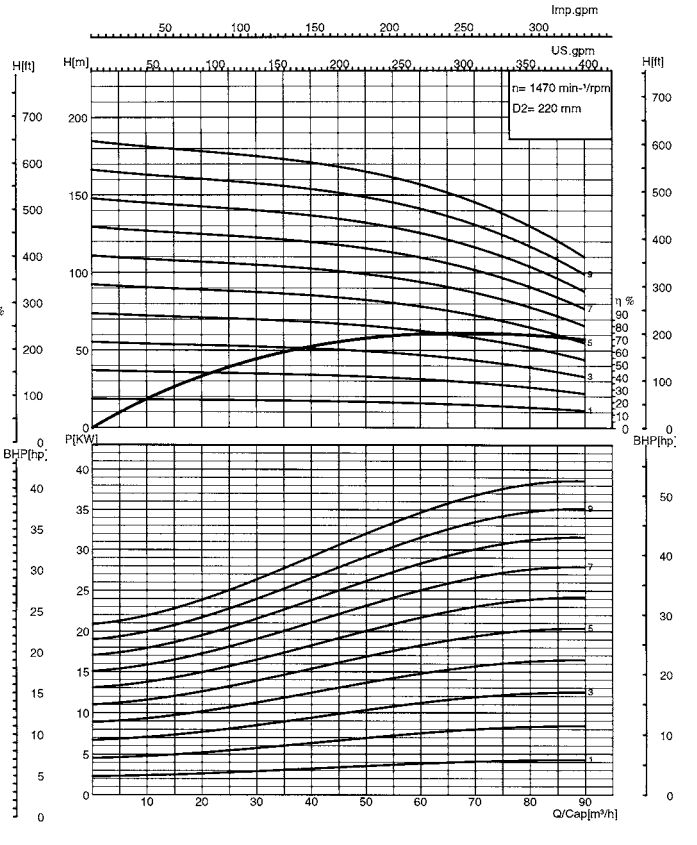
GLV - 50 speed 1450 rpm



GLV - 65 speed 1450 rpm

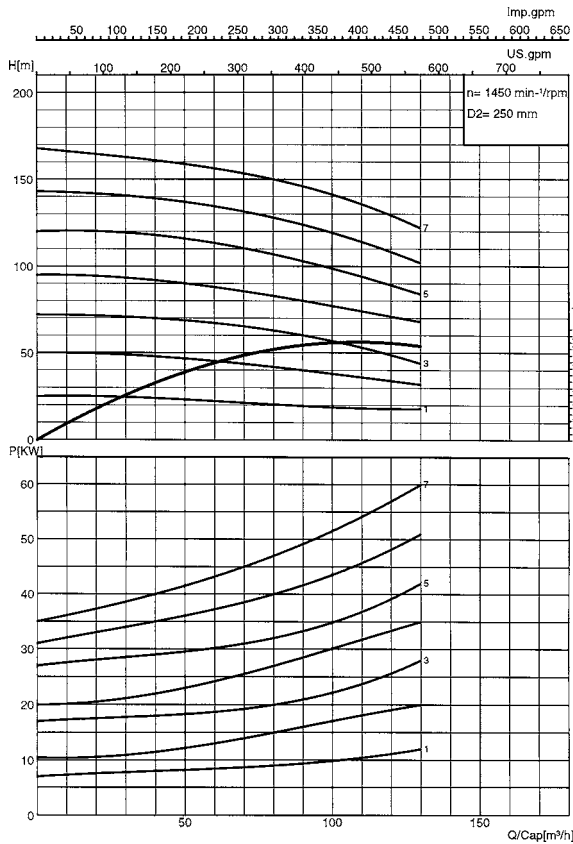


GLV - 80 speed 1450 rpm

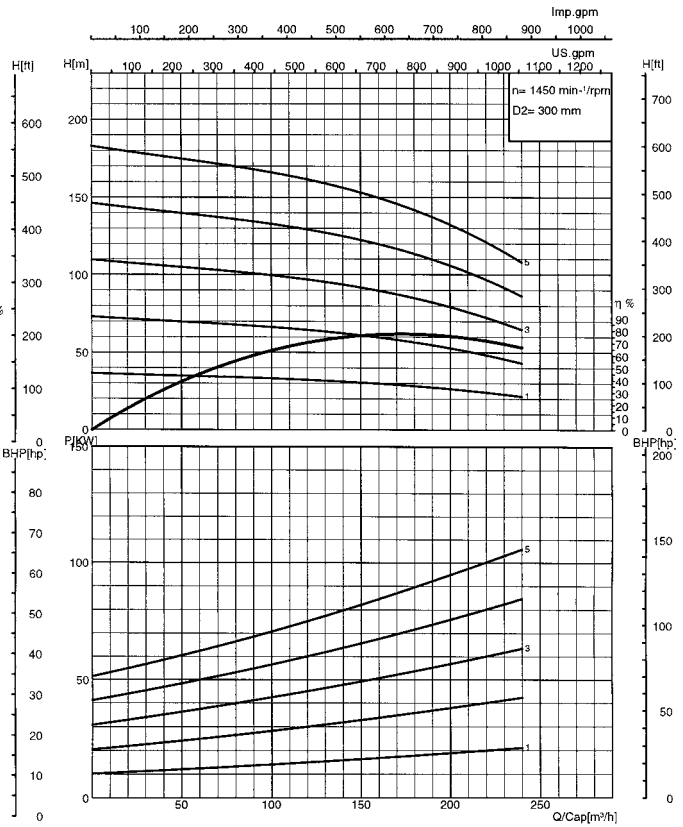


Performance curve

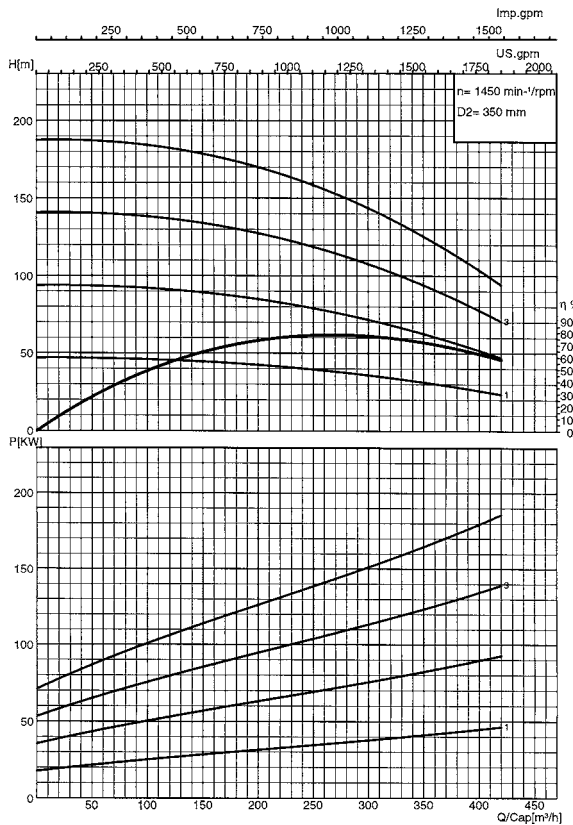
GLV - 100 speed 1450 rpm



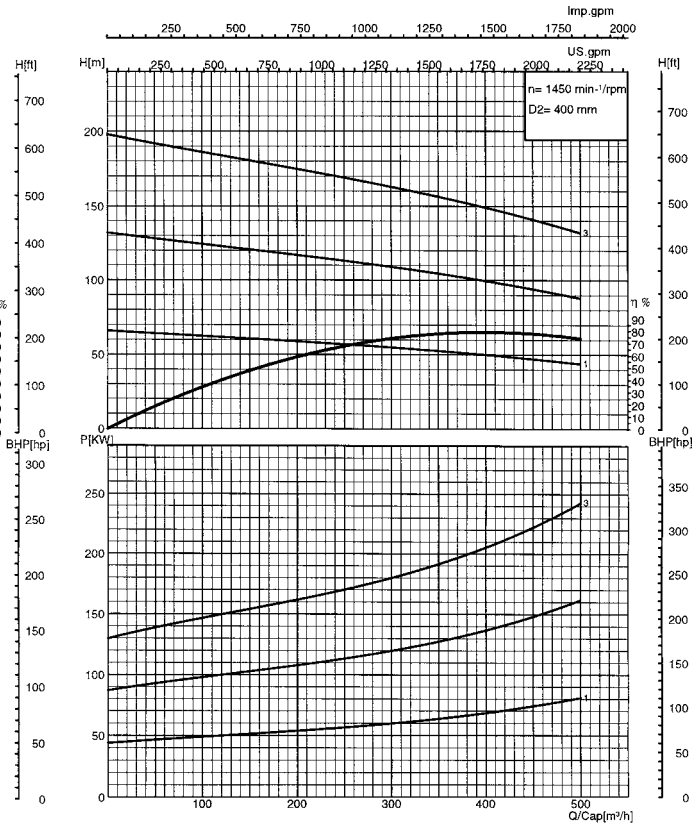
GLV - 125 speed 1450 rpm



GLV - 150 speed 1450 rpm



GLV - 200 speed 1450 rpm



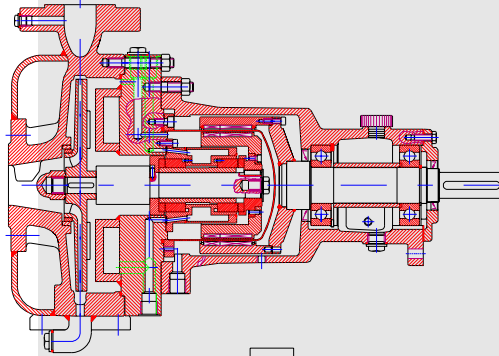
Product information

about further pump types for combustible, explosive and toxic liquids

End suction pump KRCM

Operating data

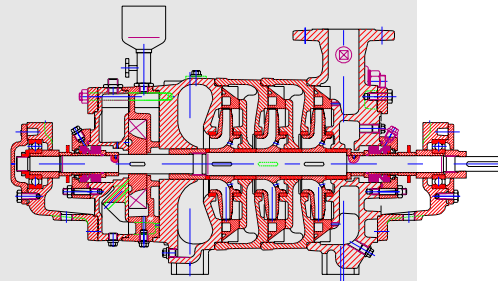
Flow up to 400 m³/h
 Head up to 140 m
 Temperature up to 260 °C



Self-priming centrifugal pump GLA

Operating data

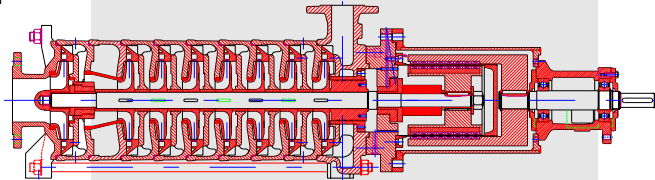
Flow up to 500 m³/h
 Head up to 160 m
 Temperature up to 60 °C



Multi-stage centrifugal pump GMZM

Operating data

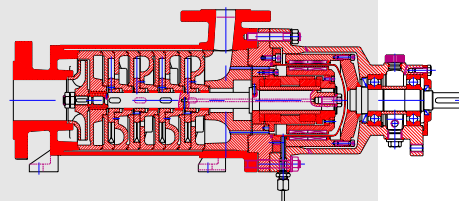
Flow up to 300 m³/h
 Head up to 340 m
 Temperature up to 200 °C



Self-priming side channel pump KCDM

Operating data

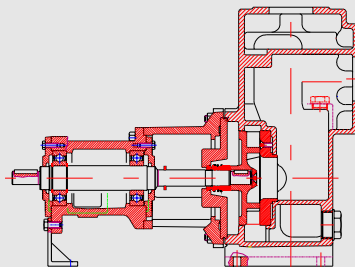
Flow up to 36 m³/h
 Head up to 245 m
 Temperature up to 200 °C



Self-priming centrifugal pump KRES

Operating data

Flow up to 100 m³/h
 Head up to 60 m
 Temperature up to 95 °C



Subject to technical modifications.
 Performances, dimension and weight not binding!