

Stork SRT

Internal gear pumps for viscous liquids

The Stork positive displacement pumps are based on the internal gear principle. These pumps are particularly suitable for clean and slightly contaminated media. The pumps guarantee a non-pulsating flow of the liquid.

Applications

Suitable for a wide range of fluids:
from slightly viscous to highly viscous, clean or slightly abrasive, lubricating or non-lubricating.
Suitable for flooded suction or self-priming applications
Examples:
oils, tar, asphalt, sugar solutions, molasses, glue, glycerin, fats, chocolate, varnish, inks, paints, etc.

Advantages

- Back and front pull-out construction.
The pumps can easily be opened on both sides for cleaning, inspection or maintenance.
- "Stuffing box pressure reduction system" in pumps from size 50-onwards; less leakage from stuffing box and a longer service life of the mechanical shaft seal thanks to internal circulation of the medium behind the rotor to the suction side.
- Adjusting of the axial play. The axial play can be adjusted in the event of wear to the rotor and idler. The play can be increased for pumping liquids with a high viscosity, so that the friction losses are reduced.
- Connections for venting, draining and flushing.

Technical specifications

Maximum	SRT	SRTR	SRTF	
Capacities	160	85	40	m³/h
Working pressures	16*	10*	10	bar
Temperatures	300	180	100	°C
Viscosities	80.000	80.000	2.500*	mPa.S
Speed	1.750	1.750	1.750	min⁻¹

* Higher values possible depending on the application

Product range

The Stork positive displacement pumps can be supplied in many types and versions:

- SRT: Cast iron pump with free shaft end, with cast iron or steel rotor and idler.
SRTR: Stainless steel pump (AISI 316) with free shaft end, cast iron bearing bracket.
SRTF: Close-coupled cast iron SRT pump.
Nodular cast iron and cast steel executions are possible.

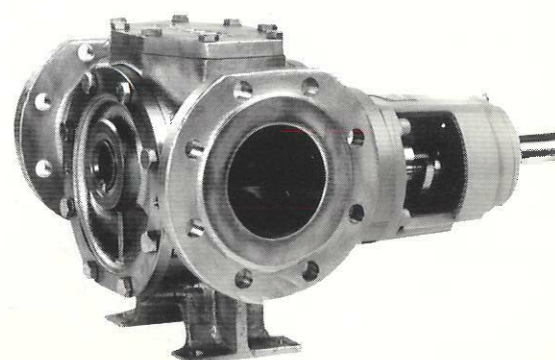
Materials

	SRT(F)	SRTR
Pumpcasing	cast iron	stainless steel
Rotor & idler	cast iron, steel	stainless steel
Shaft	steel	stainless steel
Bearings	bronze, cast, iron, carbon, ceramic tungsten carbide	bronze, carbon ceramic tungsten carbide
Seal	packing single (DIN 24960) double (DIN 24960)	packing single (DIN 24960) double (DIN 24960)

Special requirements can be executed on request

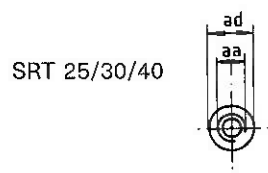
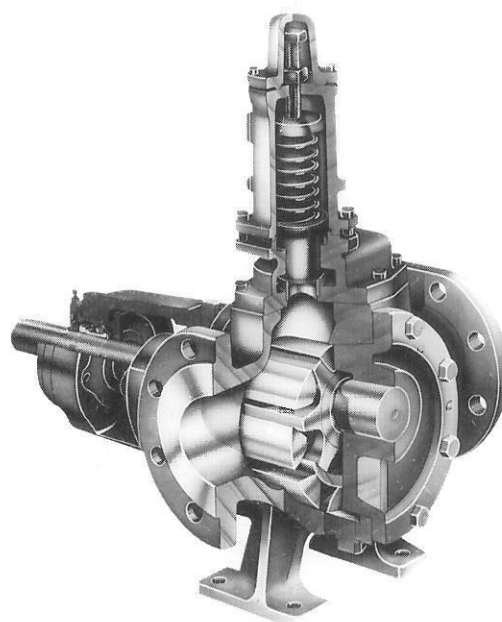
Options

Safety valves and cooling- or heating jackets are optionals on the pump. The heating jackets, only on pumpcover or on pumpcover and rotor casing, are available in two versions: jacket in cast iron with thread connection and jacket in nodular cast iron with flanges according to DIN 4754 for heating oil.



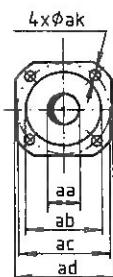
Technical specifications

Sizes	maximum capacity m ³ /h	speed rpm	pressure bar
25	1.6	1450	16
	1.9	1750	16
32	2.6	1450	16
	3.2	1750	16
40	5.0	1450	16
	6.1	1750	16
50	12.6	1450	16
65	20.0	1450	16
80	33.0	960	16
	39.5	1150	16
100	50.0	960	10
125	83.0	750	10
150	166.0	420	10

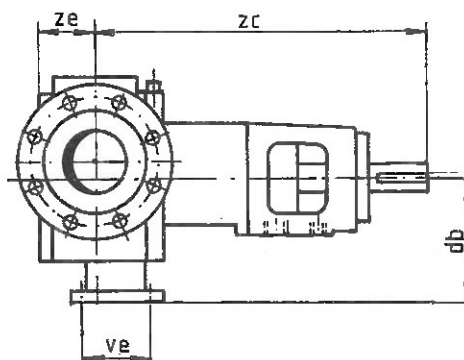
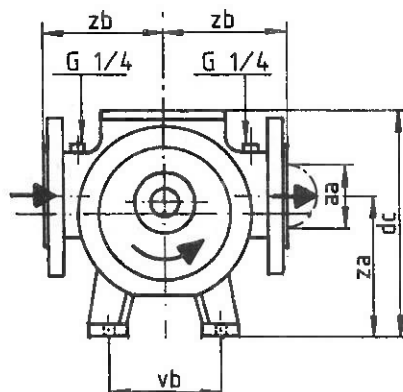
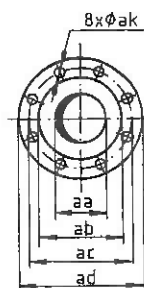


SRT 25/30/40

SRT 50/65



SRT 80/100/
125/150



Dimensions

SRT(R)	25/32	40	50	65	80	100	125	150
PN16	aa	25/32	40	50	65	80	100	125
	ab	-	-	100	118	135	153	180
	ac	-	-	125	145	160	180	210
	ad	60	70	125	145	200	200	250
	ak	-	-	18	18	18	18	22
ANSI 16.5 class 160	ac	-	-	121	140	152.5	190.5	216
	ak	6	6	19	19	19	19	23
	db	80	100	112	112	160	160	200
	dc	147	180	210	220	300	315	382
	vb	90	100	120	130	160	160	200
	ve	35	45	60	60	90	90	125
	za	90	110	125	125	180	185	230
	zb	65	80	125	125	160	180	200
	zc	216	256	355	355	436	446	565
	ze	50	55	60	70	80	90	115
mass [kg]	8	14	28	34	63	75	146	450
safety valve	2	2	5	5	7	8	8	44

Program

STORK INTERNAL GEAR PUMPS	Size	Inlet and outlet connections	Safety valve
SRT SRTR SRTF	25	1"	horizontal
SRT SRTR SRTF	32	1 1/4"	horizontal
SRT SRTR SRTF	40	1 1/2"	horizontal
SRT SRTR SRTF	50A	50 mm	horizontal
SRT SRTR SRTF	50B	50 mm	horizontal
SRT SRTR SRTF	65	65 mm	horizontal
SRT SRTR SRTF	80	80 mm	vertical
SRT SRTR -	100	100 mm	vertical
SRT SRTR -	125	125 mm	vertical
SRT - -	150	150 mm	vertical



SRT 50a - SRTF 50a - SRTF 50a

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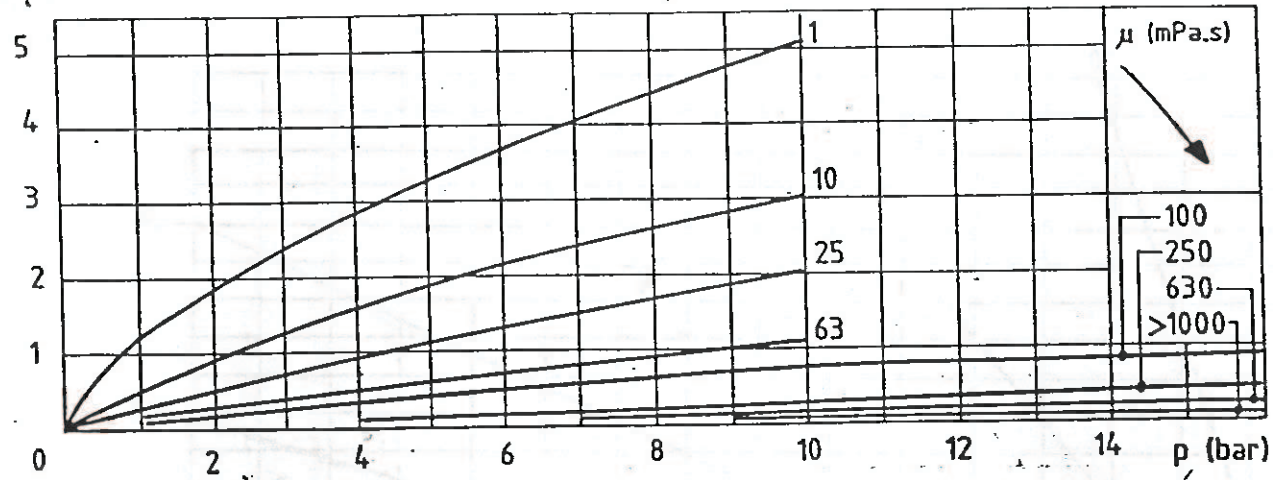
$$Q_l = f(p, \mu)$$

d.d. 1986-09

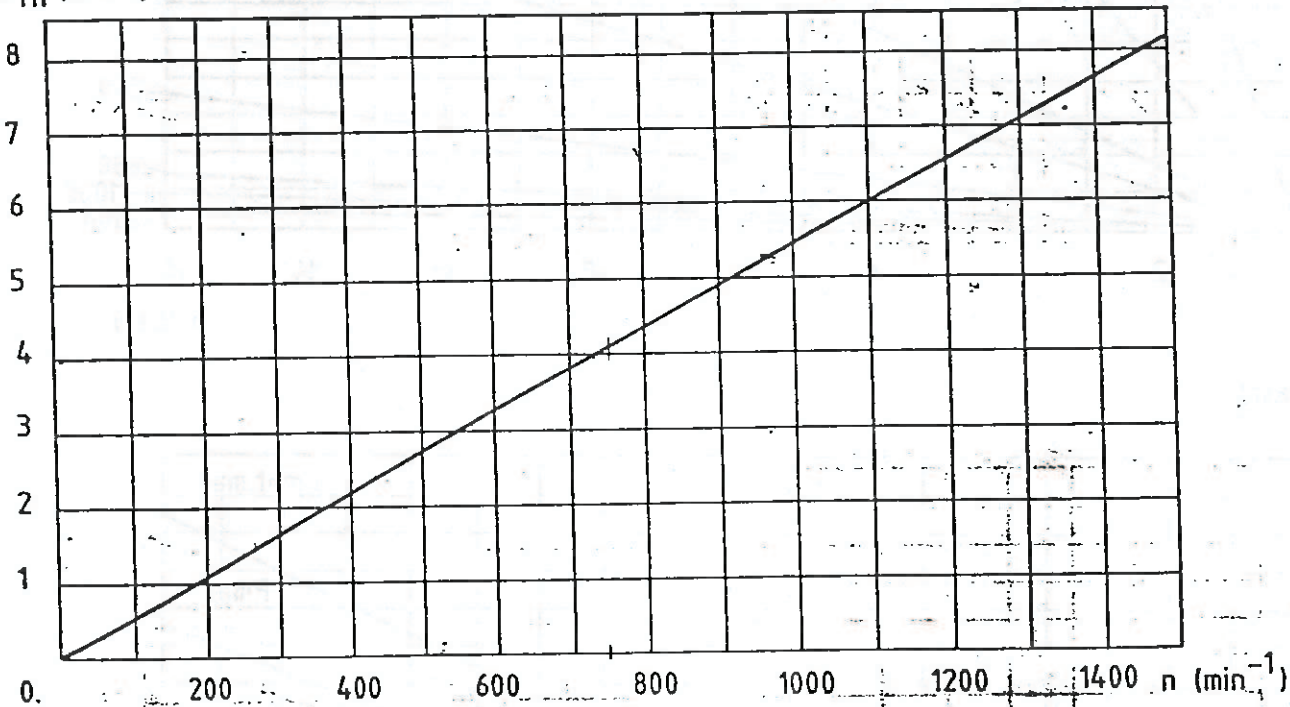
$$Q_{th} = f(n)$$

$$NPSH = f(n, \mu)$$

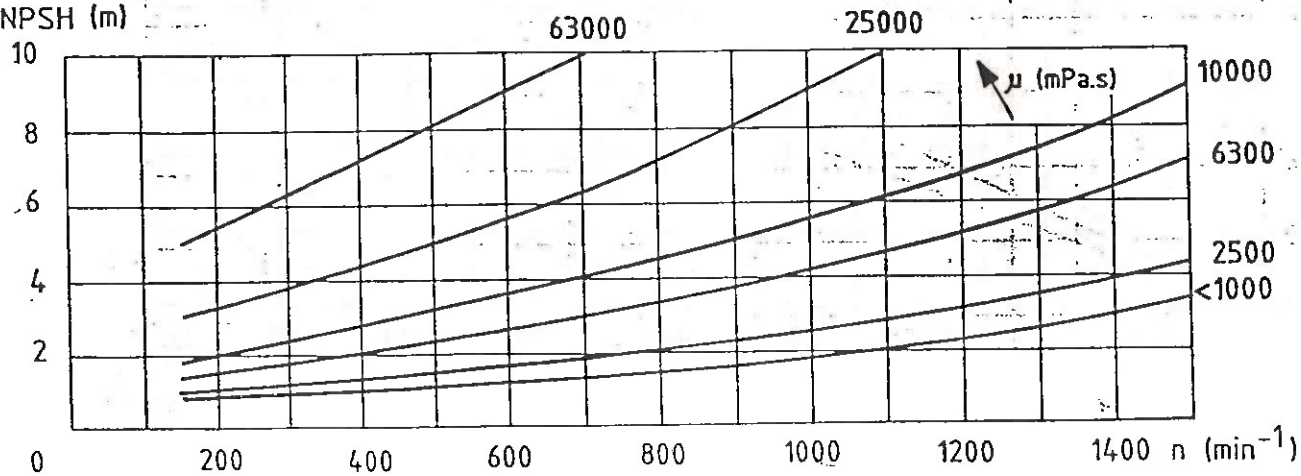
Q_l (m³/h)



Q_{th} (m³/h)



NPSH (m)





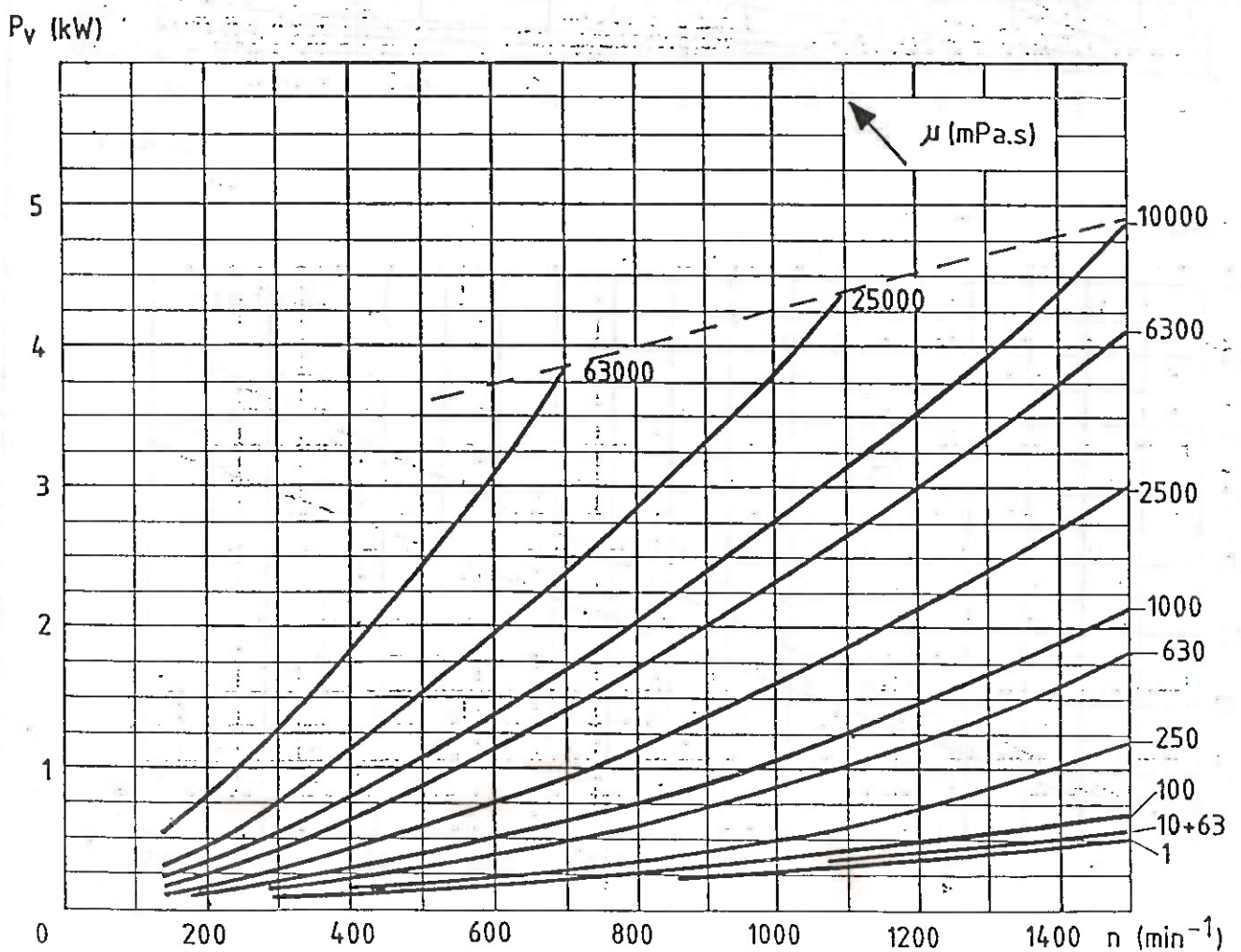
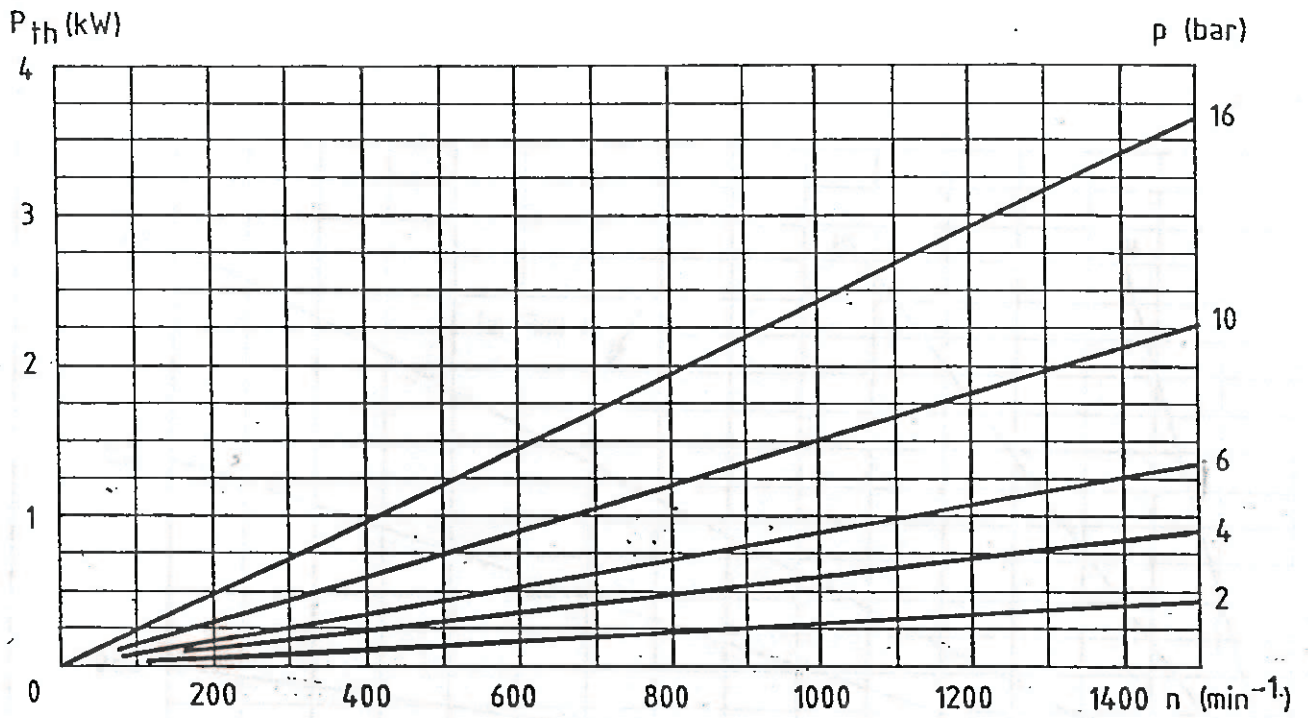
SRT 50a - SRTR 50a - SRTF 50a

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$$P_{th} = f(n, p)$$

d.d. 1986-09

$$P_v = f(n, \mu)$$





SRT 50a - SRTTR 50a - SRTF 50a

No.: SRT/04.20.03

$$n_{\min} = f(p, \mu)$$

d.d. 1986-09

$$P_{\max} = f(n)$$

