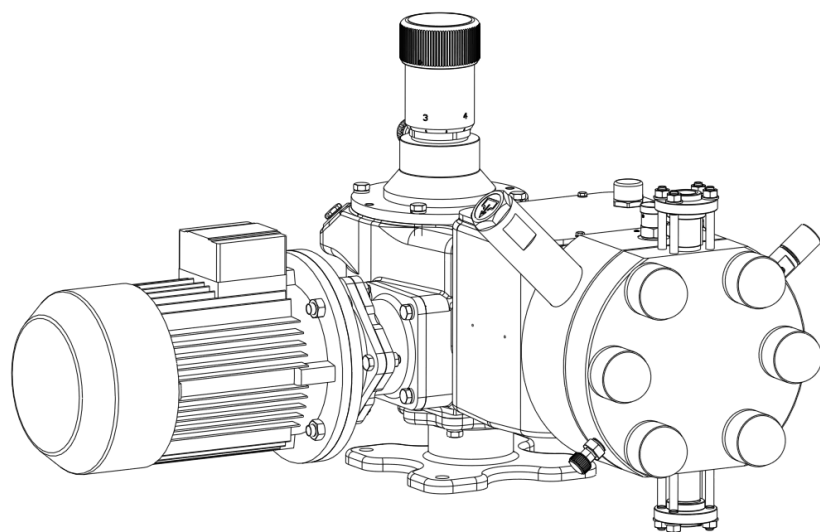




Technical characteristics

- Flow rates: from 113 to 1830 l/h
- Max Pressure: 4 MPa (40 bar)
- Ambient temperature: -10 °C + 40 °C
- Max altitude: 1000 m (A.S.L.)
- Fluid operating temperature: -5 °C + 50 °C
- Viscosity up to 1000 mPa·s (1000 cP)
- Stroke adjustment during operation from 0 to 100%
- Accuracy $\pm 1\%$ on the turndown ratio 10:1
- Built-in overpressure valve
- Double diaphragm and diagnostic of the rupture
- Diaphragm duration up to 20.000 hours, depending of the application
- CE marking
- Protection: IP 55

Tork series hydraulic diaphragm dosing pumps are designed with a heavy-duty design, high safety and exceptional control. The broad variety of heads execution offers a wide selection of dosing pumps to cover practically any application need.

Mechanism

Available in different sizes, they are mechanical return type, giving the maximum reliability in all working conditions.

General characteristics:

- Low noise integral gearbox, worm type, oil bath lubricated
- Reduced energy consumption based on low friction rolling bearings design
- Precise stroke length adjustment both manually and/or automatically actuated.
- Easy “on field” installation of electrical servomotor on manual stroke adjustment mechanism.

Diaphragm Pump head

- High capacity flexibility
- Easy to change spares parts (all “one cartridge” solution).
- Maximum compatibility PTFE diaphragm
- Visual or remote diaphragm failure detection

DOSING PUMP

TORK SERIES TY N1 - Hydraulic Double Diaphragm



PUMP KEY CODE

	Field 1	Field 2	Field 3	Field 4	Field 5	Field 6	Field 7	Field 8	Field 9	Field 10	Field 11	Field 12	Field 13	Field 14
	T	Y	40	N1	2F	A	B	M	F	4	G	V	0	N
Field 1	model													
Field 2	type													
Field 3	diameter													
Field 4	mechanism													
Field 5	material													
Field 6	valve type													
Field 7	connection													
Field 8	flow rate adjustment													
Field 9	gear ratio													
Field 10	motor poles/phases													
Field 11	motor power													
Field 12	pump head options													
Field 13	motor position													
Field 14	optionals													

Field 1	model	T	TORK					
Field 2	type	Y	Hydraulic Double Diaphragm					up to 40 bar
Field 3	diameter	30÷90	from 30 to 90 mm					
Field 4	mechanism	N1	stroke length 25 mm					
Field 5	material		head	diaphragm	ball	valve seal	valve seat	
		4J	PVDF	PTFE	ceramic	FPM	PVDF	
		2F	SS 316	PTFE	SS 316	SS 316	SS 316	
Field 6	valve type	A	Single ball					
		B	Double balls					
Field 7	connection	B	STANDARD threaded connection BSPP					
Field 8	flow rate adjustment	M	Manual with adjustment knob - STANDARD					
		E	Electric actuator					
Field 9	gear ratio	A	1:7					
		D	1:12					
		F	1:15					
Field 10	motor poles/phases	4	4/3					
Field 11	motor power	kW						
		O	without motor					
		E	0,55					
		F	0,75					
		G	1,1					
H	1,5							
Field 12	head options	V	Visual diaphragm failure detection					
Field 13	motor position	0	STANDARD - B5 - Horizontal					
Field 14	optionals	N	STANDARD					

HYDRAULIC CHARACTERISTICS

TORK TY N1 PVDF

Pump Model	Ø Diaph. [mm]	Stroke/min	Flow rate		Max back pressure		Connection	Motor Power [kW]
			l/h	gl/h	bar	p.s.i.		
TY30N14JABMD4EV0N	30	117	117	30.91	20	290.08	1/2" F	0.55
TY40N14JABMF4FV0N	40	93	165	43.59	20	290.08	1/2" F	0.75
TY50N14JABMF4FV0N	50	93	258	68.16	20	290.08	1/2" F	0.75
TY70N14JABMF4GV0N	70	93	518	136.84	12	174.05	1" F	1.1
TY90N14JABMF4GV0N	90	93	861	227.45	7	101.53	1 1/2" F	1.1
TY90N14JABMA4HV0N	50	200	1830	483.43	7	101.53	1 1/2" F	1.5

TORK TY N1 SS316L

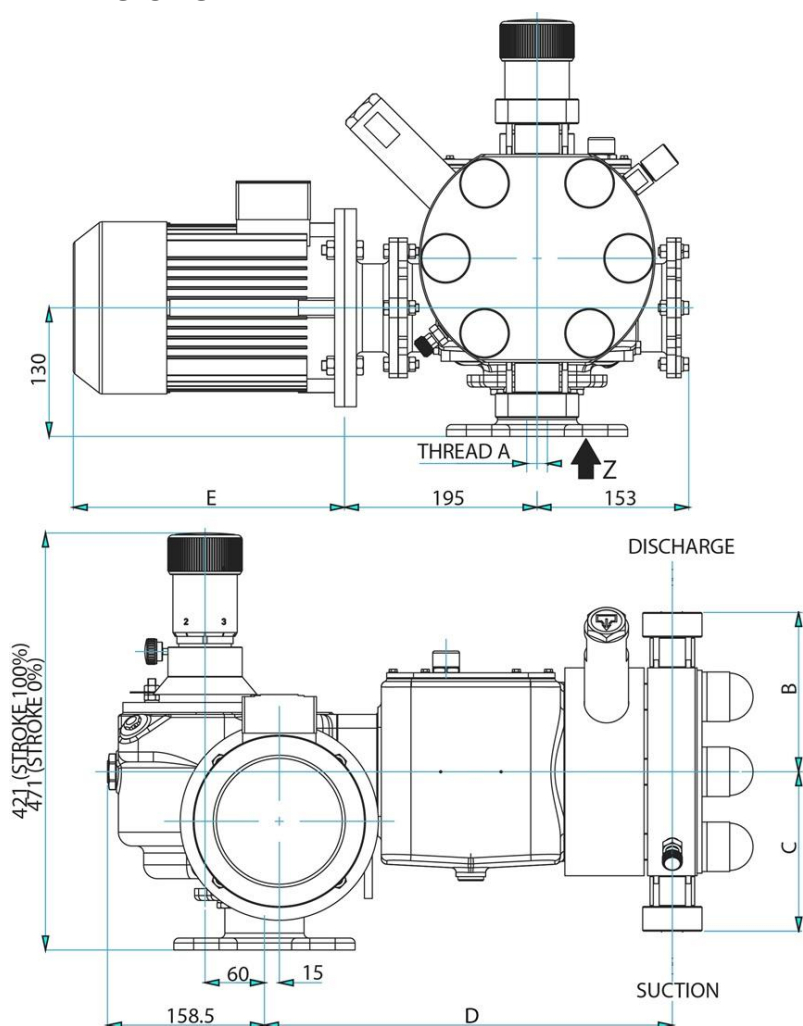
Pump Model	Ø Diaph. [mm]	Stroke/min	Flow rate		Max back pressure		Connection	Motor Power [kW]
			l/h	gl/h	bar	p.s.i.		
TY30N12FABMD4EV0N	30	117	113	29.85	40	580.16	1/2" F	0.75
TY40N12FABMF4FV0N	40	93	161	42.53	36	522.14	3/4" F	1.1
TY50N12FABMF4FV0N	50	93	257	67.89	23	333.59	3/4" F	1.1
TY70N12FABMF4GV0N	70	93	516	136.31	12	174.05	1" F	1.1
TY90N12FABMF4GV0N	90	93	863	227.98	7	101.53	1" F	1.1
TY90N12FABMA4HV0N	50	200	1771	467.85	7	101.53	1" F	1.5

DOSING PUMP

TORK SERIES TY N1 - Hydraulic Double Diaphragm

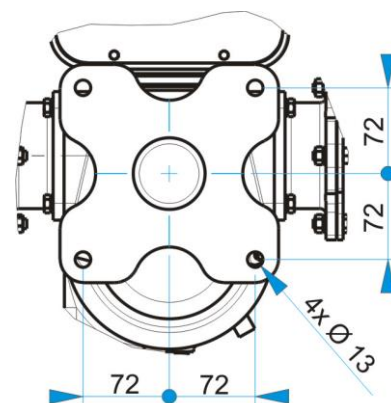


DIMENSIONS



Allowable loads referred to pump nozzles				
5B / 4J	Fx-y-z	14 N	Mx-y-z	5 Nm
	Ft	20 N	Mt	8 Nm
2F	Fx-y-z	139 N	Mx-y-z	55 N
	Ft	196 N	Mt	79 Nm

FIXING HOLES – VIEW FROM Z



PUMP MODEL	DIMENSIONS [mm]				ESTIMATED WEIGHT kg (without motor)
	A	B	C	D	
TY30N1 4J A..	BSPP 1/2"F	187	187	407	73
TY40N1 4J A..	BSPP 1/2"F	161	161	412	71,5
TY50N1 4J A..	BSPP 1/2"F	161	161	412	72
TY70N1 4J A..	BSPP 1"F	219	219	430	84
TY90N1 4J A..	BSPP 1 1/2"F	284	284	469	105
TY30N1 2F A..	BSPP 1/2"F	194	194	407	82
TY40N1 2F A..	BSPP 3/4"F	187	187	412	88
TY50N1 2F A..	BSPP 3/4"F	187	187	412	87
TY70N1 2F A..	BSPP 1"F	237	237	430	111
TY90N1 2F A..	BSPP 1" F	237	237	430	111