



Technical Catalogue



2CY Series
Gear Pump

2CY SERIES GEAR PUMP



1. Application

It applies to delivering non-corrosive lubricating-oil or equivalent liquid without solid particles and fibres at temperature below 80°C and with the viscosity of $5 \times 10^{-6} \sim 1.5 \times 10^{-3} \text{ m}^2/\text{s}$ (5-1500cSt). It applies to hydraulic system, too.

2. Application Scope

It can give performance as transferpump or booster pump in oil delivery system, and a fuel pump for delivery, pressurization and injection in fuel supply system. It can be also applied as hydraulic pump supplying hydraulic power in hydraulic system and in all industry fields as lubricating pump.

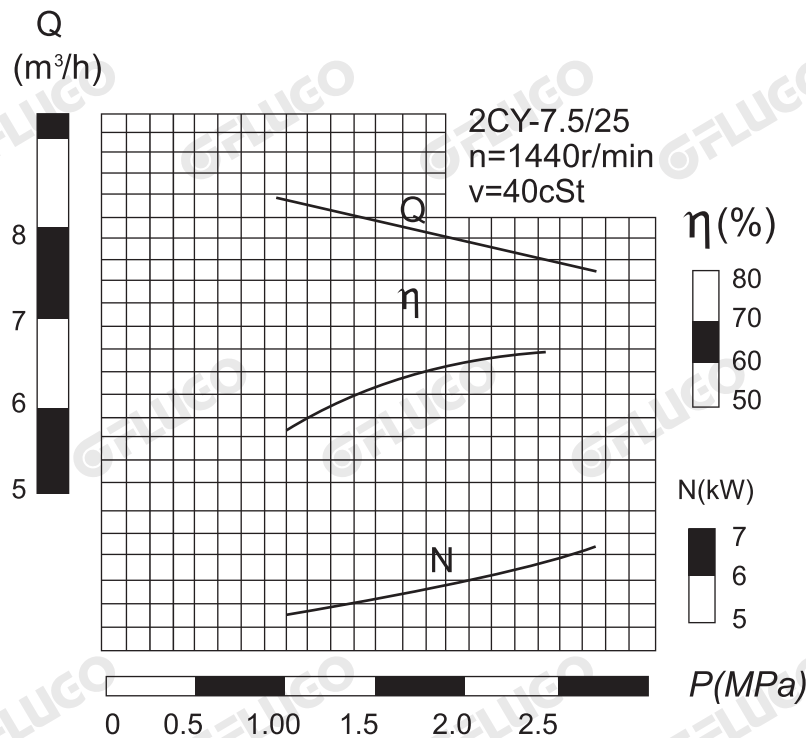
3. Structure Features

- 2CY series gear pumps are mainly composed of gears, axles, pump body, pump cap, bearing sleeves and axle-end seals, etc. The nitriding-treated gears have the advantage of higher hardness and wear property, and they rotate with the axles inside the replaceable bearing sleeves. All of pump's parts can be lubricated by delivered medium when working.
- Four bearing sleeves are installed suspended in pump body and can be automatically adjusted with facing gaps clearance complying with pressure change, therefore, it results in stable pump pressure, little discharge, flow pulsation and higher volume efficiency.

DIAGRAM OF PERFORMANCE CURVE

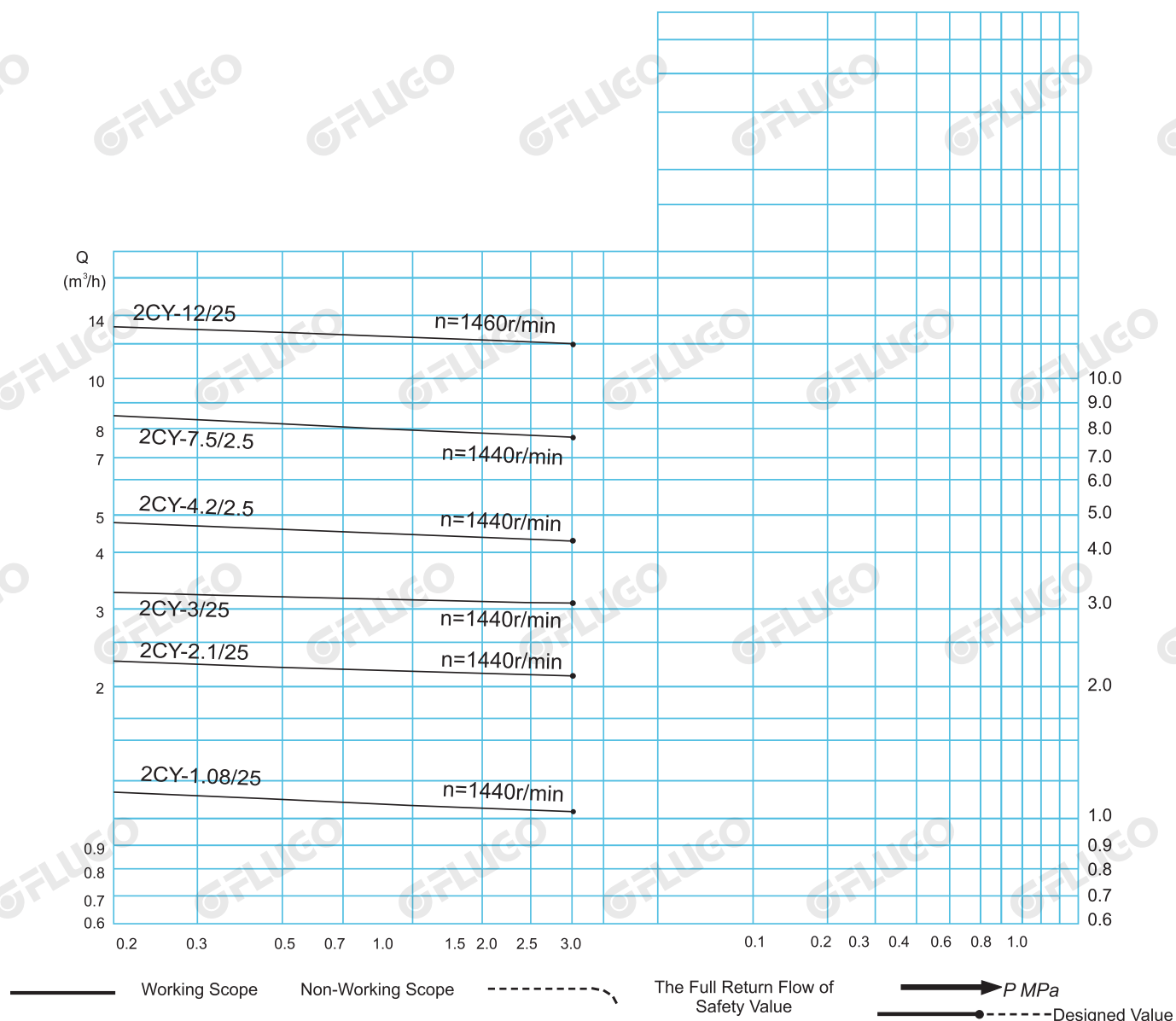
Performance data of all gear pump have been defined on basis of the viscosity of $4 \times 10^{-3} \text{m}^2/\text{s}(40\text{cSt})$. The data indicated in the performance diagram is suitable to medium viscosity of $1 \times 10^{-5} \sim 8 \times 10^{-5} \text{m}^2/\text{s}(10 \sim 80\text{cSt})$. Of which exceeds the above viscosity, the data will be re-defined according to client's demands.

The given exhausting pressure of all gear pumps is the highest working pressure, and pumps can perform normally within range of the rated working pressure, which can be found in diagram No.1



2CY-7.5/25
Diagram of performance Curve of
Model 2CY-7.5/25 Gear pump

WORKING SCOPE(DIAGRAM NO.1)



2CY FUNCTIONAL DATA OF 2CY SERIES GEAR PUMPS

Model	Capacity Q		Speed n r/min	Exhaust Pressure P MPa	(NPSH)r m	Efficiency η %	Motor	
	m³/h	L/min					kW Power	Model
2CY-1.1/1.45	1.1	18.3	1400	1.45	5	44	1.5	Y90L-4
2CY-2/1.45	2	33.3	1420	1.45	5	44	2.2	Y100L1-4
2CY-3.3/0.33	3.3	55	1400	0.33	7	41	1.5	Y90L-4
2CY-5/0.33	5	83.3	1420	0.33	7	43	2.2	Y100L1-4
2CY-8/0.33	8	135	940	0.33	5	46	2.2	Y112M-6
2CY-12/0.33	12	200	1440	0.33	5	46	4	Y112M-4
2CY-18/0.36	18	300	960	0.36	5	42	5.5	Y132M2-6
2CY-29/0.36	29	483.3	1440	0.36	5.5	42	11	Y160M-4
2CY-38/0.28	38	633	970	0.28	6	43	11	Y160L-6
2CY-58/0.28	58	960	1470	0.28	6.5	43	18.5	Y180M-4

Model	Capacity Q		Speed n r/min	Exhaust Pressure P MPa	(NPSH)r m	Efficiency η %	Motor	
	m³/h	L/min					kW Power	Model
2CY-1.08/2.5	1.08	18	1420	2.5	9.5	58	2.2	Y100L1-4
2CY-2.1/2.5	2.1	35	1420	2.5	9.5	58	3	Y100L2-4
2CY-3/2.5	3	50	1440	2.5	9.5	59	4	Y112M-4
2CY-4.2/2.5	4.2	70	1440	2.5	9.5	59	5.5	Y132S-4
2CY-7.5/2.5	7.5	125	1440	2.5	9.5	63	7.5	Y132M-4
2CY-12/2.5	12	200	1460	2.5	9.5	63	15	Y160L-4



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