THM

Fixed Displacement Bent Axis Piston Motor T2FM

Size 16.....180

Series 61

Nominal pressure upto 40 MPa

for open and closed circut

Features

– Fixed displacement motor T2FM of axial piston, bent axis design, suitable for hydrostatic drives in open and closed circuits
– Use in mobile and industrial applications
– Output speed is proportional to input flow and inversely proportional to displacement
– Drive torque increases with the pressure drop across the unit
– Careful selection of the displacements offered, permit sizes to be matched to practically every application
– Favourable power / weight ratio – Compact design
– Optimum efficiency – Economical conception – One piece pistons with piston rings

Table of values

Size					16	23	28	32	45	56	63	80
Displacement		V_g	cm^3		16	22,9	28,1	32	45,6	56,1	63	80.4
Max. Speed		n_{max}	min^{-1}		8000	6300	6300	6300	5600	5000	5000	4500
		$n_{max\ intermit.}$	min^{-1}		8800	6900	6900	6900	6200	5500	5500	5000
Max. flow	n_{max}	$q_{V\ max}$	L/min		128	144	176	201	255	280	315	360
Torque constants		T_k	Nm/MPa		2,5	3,6	4,45	5,09	7,25	8,9	10	12.7
Torque at	Δp = 35 MPa	T	Nm	24,7	88	126	156	178	254	312	350	445
	Δp = 40 MPa	T	Nm	–	100	144	178	204	290	356	400	508
Case volume			L		0,17	0,20	0,20	0,20	0,33	0,45	0,45	0,55
Moment of inertia about drive axis		J	kgm^2		0,0004	0,0012	0,0012	0,0012	0,0024	0,0042	0,0042	0,0072
Weight (approx.)		m	kg		5,4	9,5	9,5	9,5	13,5	18	18	23

Size				90	107	125	160	180
Displacement		V_g	cm^3	90	105,7	125	160,4	180
Max. Speed		n_{max}	min^{-1}	4500	4000	4000	3600	3600
		$n_{max\ intermit}$	min^{-1}	5000	4400	4400	4000	4000
Max. flow	n_{max}	$q_{V\ max}$	L/min	405	427	500	577	648
Torque constants	T_k	Nm/MPa	1,43	17	19,9	25,4	28,6	31,8
Torque at	Δp = 35 MPa	T	Nm	501	595	697	889	1001
	Δp = 40 MPa	T	Nm	572	680	796	1016	1144
Case volume			L	0,55	0,8	0,8	1,1	1,1
Moment of inertia about drive axis		j	kgm^2	0,0072	0,0116	0,0116	0,0220	0,0220
Weight (approx.)		m	kg	23	32	32	45	45

T2FM - Ordering code / Standard Program

T2F	M			/	6						

Axial piston unit

Bent axis design, fixed displacement for use with mineral oil	T2F

Drive shaft bearings

	16...180
Mechanical bearings (no code)	●

Mode of operation

Pump, open circuit	M

Size

≙ Displacement V mL/r_g [3])												
16	23	28	32	45	56	63	80	90	107	125	160	180

Series

	6.

Index

sizes 16...180	1

Direction of rotation

Viewed on shaft end	alternating	W

Seals

FKM (fluor-caoutchouc)	V

Shaft end

	16	23	28	32	45	56	63	80	90	107	125	160	180	
Splined shaft DIN 5480	●	●	●	●	●	●	●	●	●	●	●	●	●	A
	-	●	●	-	●	●	-	●	-	●	-	●	-	Z
Parallel shaft with key, DIN 6885	●	●	●	●	-	●	●	●	●	●	●	●	●	B
	-	●	●	-	●	●	-	●	-	●	-	●	-	P

flange Mounting

	16	23	28	32	45	56	63	80	90	107	125	160	180	
ISO 4-hole	●	●	●	●	●	●	●	●	●	●	●	●	●	B

Service line connections [2])

Ports A and B SAE, at rear end	-	●	●	●	●	●	●	●	●	●	●	●	●	01
Ports A and B SAE, at opposite side	●	-	-	-	-	-	-	-	-	-	-	-	-	02
Ports A and B threads, at side and opposite	●	-	-	-	-	-	-	-	-	-	-	-	-	03

Please check for other port types and orientation
Integrated Flushing, relief, boost valve are available

= preferred type

● = available
– = not available

without valves	0
with pressure relief valves (without pressure sequence range)	1
with pressure relief valves (with pressure sequence range)	2
with Integrated Flushing valves	6
with built-on flushing and boost valves	7

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The specified data is for product description purposes only and may not be deemed to be guaranteed unless expressly confirmed in the contract.

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