

NINGBO ZHONGYI: LEADER MANUFACTURER OF ORBITAL MOTORS



Ningbo Zhongyi Hydr. Motor Co. Ltd was founded in 1971.

Today the Company is recognized, in terms of quality, as the **chinese leader manufacturer of orbital motors and hydraulic steerings.** The Company also produces radial piston motors, hydraulic planetary gearboxes and hydraulic winches.

Ningbo Zhongyi has developed, introduced and certified a Company Quality System in line with ISO 9001 to increase and stabilize the products quality, all of them are CE certified.

Ningbo Zhongyi, who made in 2020 more than 500.000 orbital motors, has in Ningbo a plant of about 44.000 m², another of 80.000 m² in Wuhu Anhui and a modern R & D Center in Zhejiang.

The manufacturing plants are based on highly automated and efficient processes.

The Company established also a good cooperation with the most famous Chinese Universities, in order to have a continuous improvement in terms of products quality and reliability.

Ningbo Zhongyi has loyal relationships with the major Chinese and international OEM like SANY, XCMG, ZOOMLION, KUBOTA, BAOLI, LIUGONG.

The Company developed 2 brand, **ziHYD** mainly for Chinese market, and **THOTH** mainly for the Export market.

RUDIFLEX: EXCLUSIVE DISTRIBUTOR OF THE ZIHYD AND THOTH BRANDS

Rudiflex is a leading company in the distribution of mechanical and hydraulic components.

One of the keys of Rudiflex' success is undoubtedly the service: the company thanks to its own trucks and the collaboration with the main couriers is able to make deliveries to any customer in a timely manner.

From January 2021 Rudiflex has been appointed from Ningbo Zhongyi exclusive Distributor for the Italian market of the whole range of orbital motors with ziHYD and Thoth brands.

Thanks to this Agreement Rudiflex is able to offer to the customers a range of very high quality orbital motors at competitive prices. Furthermore, thanks to qualified personnel, high orbital motors stock and conversion kits, Rudiflex is able to respond to any request by offering prompt deliveries.





Intermittent operation: is the permissible values may occur fro max 10% of every minute Peack load: is the permissible values may occur for max. 1% of every minute.

The BMM motors offer high power/weight ratio and very good low speed performances. They have an optimized spool valve design and they can be with rear or side ports.

TY	ТҮРЕ		BMM-12,5	BMM-20	BMM-32	BMM-40	BMM-50
DISPLACEM	ENT (cc/rev)	8,2	12,9	19,9	31,6	39,8	50,3
Max	Continuous	100	100	100	100	90	70
Pressure Drop	Intermittent	140	140	140	140	140	140
(Bar)	Peak	200	200	200	160	160	160
	Continuous	11	16	25	40	45	46
Max Troque (Nm)	Intermittent	15	23	35	57	70	88
(14111)	Peak	21	33	51	64	82	100
Speed Rar	nge (Rpm)	1950	1550	1005	630	500	395
Max Flow	v (L/min)	16	20	20	20	20	20
Max Output	Power (Kw)	1,8	2,4	2,4	2,4	2,2	1,8
Weigh	t (Kg)	1,9	2	2,1	2,2	2,3	2,4



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The BMP motors, designed with spool valve, have a good quality/price ratio. This series is characterized by a compact and efficient design.

	TYPE		BMP-50	BMP-80	BMP-100	BMP-125	BMP-160	BMP-200	BMP-250	BMP-315	BMP-400
	DISPLACEME	ENT (cc/rev)	52,9	79,3	98,2	120,9	158,7	196,4	241,8	317,3	392,9
	Max	Continuous	140	140	140	140	140	140	120	100	80
	Pressure Drop	Intermittent	175	175	175	175	175	175	140	120	100
	(Bar)	Peak	220	220	220	200	220	220	200	150	130
1		Continuous	97	148	183	229	295	364	369	404	416
V	Max Troque (Nm)	Intermittent	125	189	238	292	382	470	474	501	531
	(IVIII)	Peak	149	222	276	340	445	532	568	555	596
	Speed Ran	ige (Rpm)	755	750	610	490	375	305	245	185	150
	Max Flow	(L/min)	40	60	60	60	60	60	60	60	60
	Max Output Power (Kw)		6,5	10	10	10	10	10	8	6	5,7
	Weight (Kg)		5,6	5,7	5,9	6	6,2	6,4	6,6	6,9	7,4





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The BMRY motors, with spool valve and roller design, are characterized by smooth rotational and a good starting torque. These motors can be applied in different application like: agriculture, forestry, plastics, mining, etc.

TYPE		BMRY-50	BMRY-80	BMRY-100	BMRY-125	BMRY-160	BMRY-200	BMRY-250	BMRY-315	BMRY-400
DISPLACEMI	ENT (cc/rev)	51,7	80,5	100,5	126,3	160,8	200,9	252,6	321,5	401,9
Max	Continuous	175	175	175	175	175	175	140	120	100
Pressure Drop	Intermittent	200	200	200	200	200	190	160	140	120
(Bar)	Peak	220	220	220	220	220	200	180	150	140
Mari	Continuous	110	189	236	296	378	450	470	485	500
Max Troque (Nm)	Intermittent	135	216	270	338	433	486	540	573	614
(IVIII)	Peak	144	225	281	353	450	511	579	614	710
Speed Rar	ige (Rpm)	770	745	595	475	370	295	235	185	150
Max Flow	/ (L/min)	40	60	60	60	60	60	60	60	60
Max Output Power (Kw)		7,5	12	12	12	12	11	9,5	7,5	6,5
Weigh	t (Kg)	6,9	7,3	7,4	7,7	7,9	8,4	8,9	9,4	11,4



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The BS motors, with spool valve and geroller design, are characterized by smooth rotational and a good starting torque. These motors have a very compact structure so can be applied in every application with low available space.

TY	PE	BS-50	BS-80	BS-100	BS-125	BS-160	BS-200	BS-250	BS-315	BS-400
DISPLACEM	ENT (cc/rev)	51,7	80,5	100,5	126,3	160,8	200,9	252,6	321,5	400
Max	Continuous	140	140	140	140	140	125	110	90	70
Pressure Drop	Intermittent	175	175	175	175	175	155	140	110	90
(Bar)	Peak	200	200	200	200	200	180	160	130	110
	Continuous	93	152	194	237	310	320	380	380	380
Max Troque (Nm)	Intermittent	118	189	236	296	378	398	470	470	470
(IVIII)	Peak	135	216	270	338	433	460	540	540	540
Speed Rar	nge (Rpm)	770	745	595	475	370	295	235	185	150
Max Flov	v (L/min)	40	60	60	60	60	60	60	60	60
Max Output	Power (Kw)	7	10	10	10	10	7	6	5	4
Weigh	it (Kg)	4,9	5	5,2	5,3	5,5	5,7	5,9	6,2	6,8

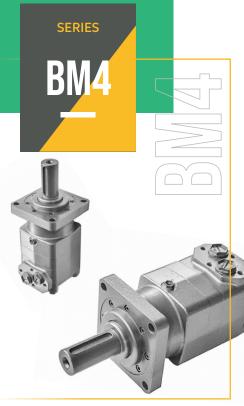




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The BM3Y motors with disc valve and roller design, offer high efficiency and long lasting life. High torque, compactness, weight and rotation stability are other qualities that permit to use them in the in various different working fields.

TY	PE	BM3Y-80	BM3Y-100	BM3Y-125	BM3Y-160	BM3Y-200	BM3Y-250	BM3Y-315	BM3Y-400	BM3Y-500
DISPLACEM	ENT (cc/rev)	80,5	100,5	126,3	160,8	200,9	252,6	321,5	40139	476,5
Max	Continuous	205	205	205	205	205	200	200	155	120
Pressure Drop	Intermittent	275	275	275	260	250	250	240	190	140
(Bar)	Peak	295	295	295	280	270	270	260	210	160
Mari	Continuous	226	282	355	451	564	684	870	813	728
Max Troque (Nm)	Intermittent	293	365	459	559	672	845	1032	1021	903
(IVIII)	Peak	306	383	481	588	708	891	1091	1141	1044
Speed Rar	ige (Rpm)	805	745	590	465	370	295	230	185	155
Max Flow	/ (L/min)	65	75	75	75	75	75	75	75	75
Max Output	Power (Kw)	16	18	18	18	18	18	17	11	9
Weigh	t (Kg)	9,8	10	10,3	10,7	11,1	11,6	12,3	13,2	14,3



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The BM4 motors with their compensated disc valve and roller design,

grant high performances. They are particularly suitable for works with high continuous torque and frequent rotation inversions.

TY	TYPE		BM4-200	BM4-250	BM4-320	BM4-400	BM4-500
DISPLACEM	ENT (cc/rev)	158,8	200,8	252,2	317,5	401,6	535,3
Max	Continuous	200	200	200	200	180	160
Pressure Drop	Intermittent	240	240	240	240	210	180
(Bar)	Peak	280	280	280	280	240	210
	Continuous	450	561	710	902	1008	1121
Max Troque (Nm)	Intermittent	559	714	883	1143	1255	1377
(INITI)	Peak	663	818	1021	1322	1431	1598
Speed Rai	nge (Rpm)	625	495	395	310	245	185
Max Flov	v (L/min)	100	100	100	100	100	100
Max Output	Power (Kw)	20,1	25,2	25,2	25,2	22	21
Weigh	Weight (Kg)		20,8	21,4	22,4	23	24





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The BM5 motors have been developed with roller and frontal disc valve design, in order to grant a performances range that includes big displacements and high torque capabilities.

TY	TYPE		BM5-400	BM5-500	BM5-630	BM5-800	BM5-985
DISPLACEM	ENT (cc/rev)	314,9	399,7	496,6	617,8	787,4	969,1
Max	Continuous	200	200	200	180	160	140
Pressure Drop	Intermittent	240	240	240	210	180	160
(Bar)	Peak	280	280	280	240	210	180
Max	Continuous	873	1108	1385	1570	1773	1900
Troque (Nm)	Intermittent	1119	1440	1783	1951	2122	2133
()	Peak	1293	1650	2060	2249	2481	2399
Speed Ra	nge (Rpm)	475	375	300	240	190	150
Max Flov	v (L/min)	150	150	150	150	150	150
Max Output	Power (Kw)	32	32	32	32	32	24
Weigh	nt (Kg)	30,7	31,5	32,4	33,6	35,2	37,2



ZDM2 hydraulic brakes are compact and modular units, compatible with BMP, BMR, BS e BM3 motors. Beyond the braking function, they avoid peak brake torque and radial loads to the motors, ensuring them a long mechanic life.

TYPE	ZDM2-430	ZDM2-630
Static Brake Torque (Nm)	410-450	580-630
Releasing pressure (Bar)	22-27	32-38
MAX Control pressure (Bar)	200	200
MAX Oil drain Pressure (Mpa)	0.5	0.5
Weight (Kg)	9	9
Lubricating Oil Volume (ml)	50-100	50-100
Speed Range (Rpm)	0-800	0-800



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RUDIFLEX. PERFECTION IN SERVICE

Innovation, experience, quality, reliability, production flexibility and a customer oriented service are the cornerstones of Rudiflex company philosophy.

In 2020 Rudiflex has finalized Partnership Agreements with leading hydraulic components manufacturers and today the company in its two divisions, hydraulic and mechanical, has a wide range of products always available at stock.

Flexibility and technical knowhow allow Rudiflex people to design and produce complete hydraulic systems that are tailored to customer's specific requirements.

The organizational changes made confirm that Rudiflex is very dynamic and ready to face the future challenges, proposing itself to its customers not only as a supplier of components but also as a Partner in the supply of mechatronic solutions.











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