

## BMM Series

### BMM Series Orbital Hydraulic Motor

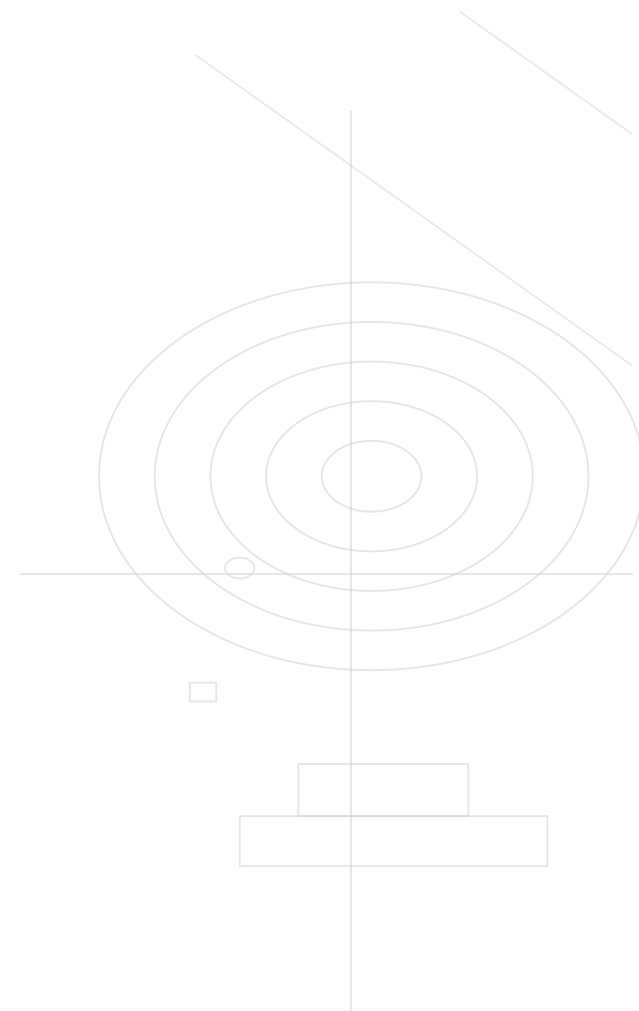
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Professional hydraulic components for  
mobile machinery and industrial systems.

Category: Orbital Hydraulic Motors

Application:

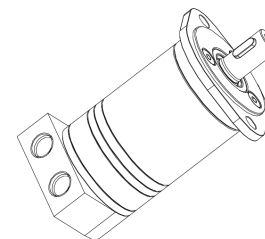
Compact Mobile Machinery / Industrial Hydraulic  
Systems



## BMM Series Orbital Hydraulic Motor

BMM Series Orbital Hydraulic Motor is a micro shaft-distribution motor that can be installed and used in a very small space. It adopts a column-mounted gerotor pair with a 4/5-tooth structure, featuring compact structure, light weight, and high power density. Features:

- \*Advanced gerotor parameter design provides low starting pressure, high efficiency, good efficiency retention, and smooth operation.
- \*The shaft seal has high pressure resistance and allows series or parallel operation.
- \*Advanced structural design provides high power density.



### Main Technical Parameters

Type		BMM 8	BMM 12.5	BMM 20	BMM 32	BMM 40	BMM 50
Actual Displacement (cm <sup>3</sup> /rev.)		8.2	12.9	20.4	32.7	40.9	51.1
Max. Speed (rpm)	Rated	1537	1256	794	495	440	352
	Continuous	1950	1550	931	581	465	372
	Intermittent	2450	1940	1220	757	606	484
Max. Torque (N.m)	Rated	8	13	20	32	38	43
	Continuous	11	16	25.6	41	46	58
	Intermittent	15	23	36	59	72	91
	Peak	21	33	52	66	84	104
Max. Output Power (kW)	Rated	1.3	1.7	1.7	1.7	1.7	1.2
	Continuous	1.8	2.4	2.4	2.4	2.2	1.8
	Intermittent	2.6	3.2	3.2	3.2	3.2	3.2
Max. Working Pressure Difference (MPa)	Rated	9	9	9	9	8.5	7.5
	Continuous	10	10	10	10	9	9
	Intermittent	14	14	14	14	14	14
	Peak	20	20	20	16	16	16
Max. Flow (L/min)	Rated	14	18	18	18	20	20
	Continuous	16	20	20	20	20	20
	Intermittent	20	25	25	25	25	25

Type	Max. Inlet Pressure	
BMM8-50 (MPa)	Rated	9
	Continuous	10
	Intermittent	14

\*Rated speed and torque refer to output values under rated flow and pressure.

\*Continuous values refer to the maximum values at which this displacement motor can operate continuously.

\*Intermittent values refer to the maximum values at which this displacement motor operates for 6 seconds within 1 minute.

\*Peak values refer to the maximum values at which this displacement motor operates for 0.6 seconds within 1 minute.

Performance Parameters

BMM-8 [8.2 cm³/rev.]

		Pressure (MPa)			Max. Continuous		Max. Intermittent	
		3.5	5	7	10	12	14	
Flow (L/min)	2	3	5	8	10	12	14	
	4	228	218	206	156	111	58	
	8	3	5	7	11	13	15	
	12	474	471	463	426	391	331	
Max. Continuous	2	3	5	7	11	13	15	
	4	953	946	926	884	855	816	
	8	2	5	7	10	13	15	
	12	1444	1426	1402	1360	1324	1288	
Max. Intermittent	15		4	7	10	12	14	
	20		1912	1900	1861	1833	1780	
				6	10	11	14	
				2395	2350	2328	2281	

BMM-12.5 [12.9 cm³/rev.]

		Pressure (MPa)			Max. Continuous		Max. Intermittent	
		3.5	5	7	10	12	14	
Flow (L/min)	2	6	8	11	16	19		
	4	140	136	119	68	35		
	8	6	8	12	17	19	23	
	12	296	289	274	229	200	145	
Max. Continuous	2	5	8	12	17	20	24	
	4	605	596	583	543	514	469	
	8	5	8	11	16	20	24	
	12	912	905	895	859	834	784	
Max. Intermittent	15	5	7	11	16	19	23	
	20	1152	1144	1136	1102	1078	1036	
		3	7	10	15	19	22	
		1542	1532	1521	1500	1482	1437	
		2	6	9	14	18	22	
		1910	1891	1878	1848	1828	1788	

BMM-20 [19.9 cm³/rev.]

		Pressure (MPa)			Max. Continuous		Max. Intermittent	
		1.7	3.5	5	7	10	12	14
Flow (L/min)	2	3	9	14	19	26	30	
	4	99	96	89	74	42	21	
	8	4	9	14	19	26	31	36
	12	197	191	182	178	134	112	74
Max. Continuous	2	4	9	13	19	27	31	36
	4	398	395	391	377	340	319	288
	8	3	8	13	18	26	31	37
	12	596	594	588	579	545	523	493
Max. Intermittent	15	3	8	12	17	25	30	36
	20	745	741	738	728	695	684	660
		1	6	11	19	24	29	35
		998	995	991	985	962	916	885
			4	9	14	23	28	33
			1247	1245	1242	1189	1180	1176

BMM-32 [31.6 cm³/rev.]

		Pressure (MPa)			Max. Continuous		Max. Intermittent	
		2	3.5	5	7	10	12	14
Flow (L/min)	2	7	15	21	28	40		
	4	61	57	52	47	16		
	8	7	15	21	29	41	48	57
	12	126	121	114	106	82	67	49
Max. Continuous	2	7	15	21	29	41	49	58
	4	250	244	239	231	207	194	167
	8	6	13	20	28	40	48	58
	12	378	374	369	362	338	322	297
Max. Intermittent	15	4	12	18	27	39	47	57
	20	476	472	468	462	441	429	406
		3	10	17	25	37	46	55
		633	630	627	619	601	585	566
		1	8	15	23	35	43	52
		791	789	787	783	766	753	732

BMM-40 [39.8 cm³/rev.]

		Pressure (MPa)			Max. Continuous		Max. Intermittent	
		3	5	7	8.5	10	12	
Flow (L/min)	2	16	27	36	44	51		
	4	45	40	34	28	17		
	8	15	26	36	44	52	63	
	12	197	195	182	176	166	154	
Max. Continuous	2	16	27	37	44	52	62	
	4	96	93	85	79	65	52	
	8	14	25	35	43	51	62	
	12	293	287	282	277	268	257	
Max. Intermittent	15	13	24	34	42	50	62	
	20	371	365	360	355	347	338	
		10	21	31	39	48	59	
		497	492	487	480	472	463	
		7	19	29	37	44	56	
		622	617	612	607	600	591	

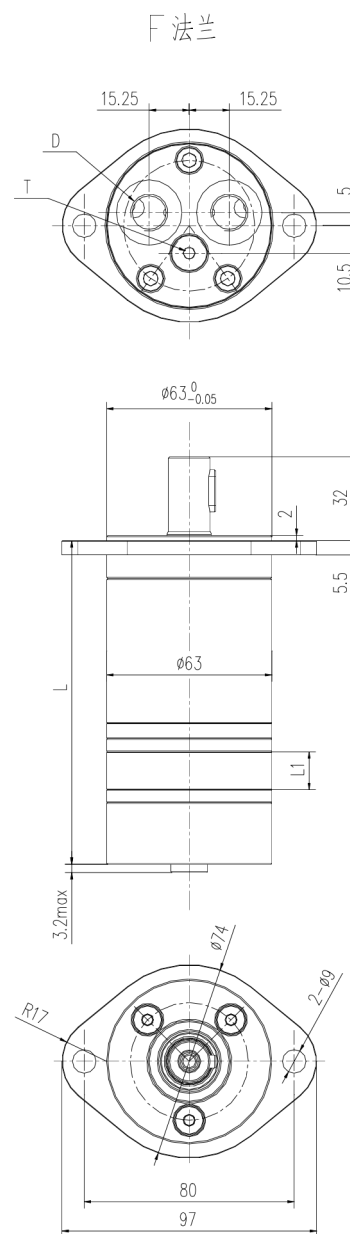
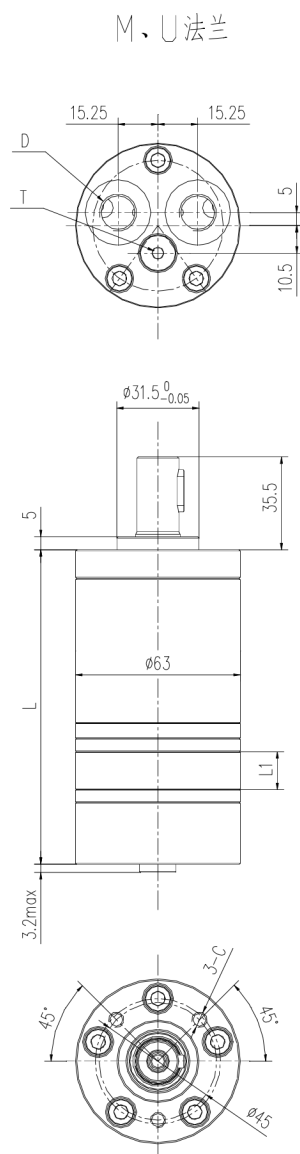
BMM-50 [50.3 cm³/rev.]

		Pressure (MPa)			Max. Continuous		Max. Intermittent	
		1.5	3	5	7	10		
Flow (L/min)	2	11	23	36	50			
	4	37	33	27	22			
	8	11	22	36	50	70		
	12	76	73	68	63	55		
Max. Continuous	2	11	21	35	50	71		
	4	157	154	149	145	137		
	8	11	20	33	49	71		
	12	237	234	231	226	218		
Max. Intermittent	15	10	18	32	47	69		
	20	296	295	294	288	282		
		8	14	29	44	64		
		395	395	393	390	381		
		4	10	25	40	59		
		498	496	494	490	484		

Torque (N·m) 29  
Speed (rpm) 612

Continuous / Intermittent

### BMM Rear Port Mounting and Connection Dimensions

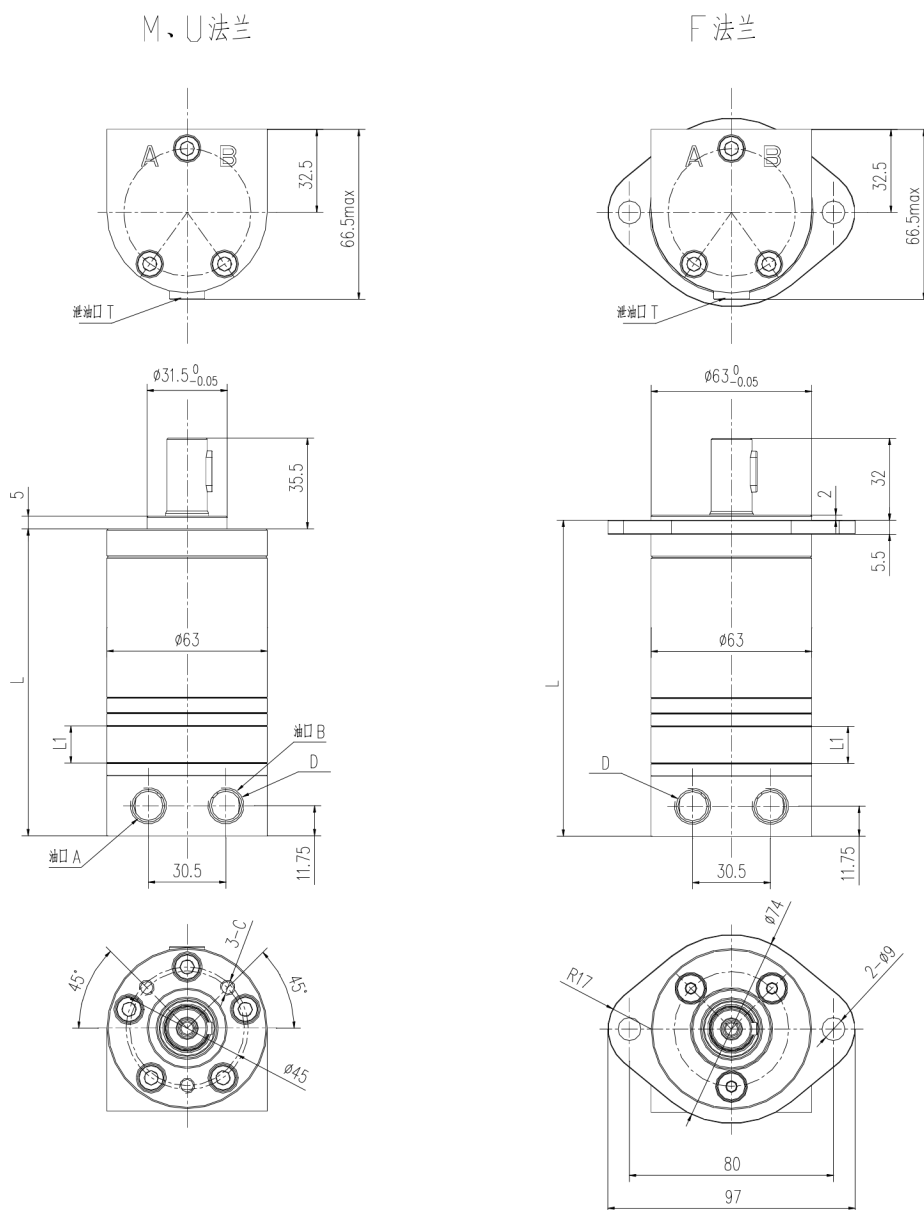


型号	M、U法兰		F法兰	
	L	L1	L	L1
BMM-8	109.7	4	113.2	4
BMM-12.5	112	6.3	115.5	6.3
BMM-20	115.7	10	119.2	10
BMM-32	121.7	16	125.2	16
BMM-40	125.7	20	129.2	20
BMM-50	130.7	25	134.2	25

代号 连接形式	M、U法兰		F法兰	
	1E(深)	1U(深)	1E(深)	1U(深)
C	[M]3-M6 (10)	[U]3-1/4-28UNF (10)	[M]-	[U]-
D	G3/8 (12)	9/16-18UNF (12)	G3/8 (12)	9/16-18UNF (12)
T	G1/8 (8)	3/8-24UNF (8)	G1/8 (8)	3/8-24UNF (8)

BMM Side Port Mounting and Connection Dimensions

Connection Dimensions

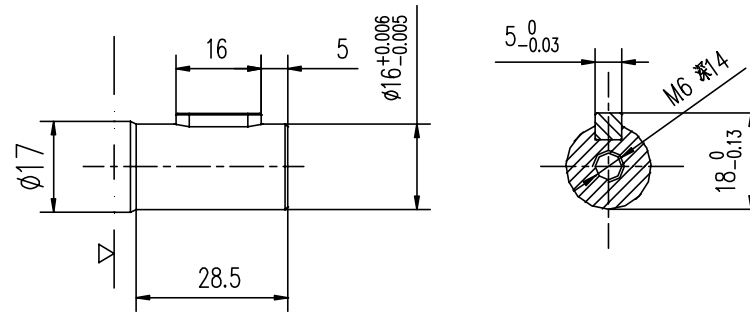


型号	M、U 法兰		F 法兰	
	L	L1	L	L1
BMM-8	109.7	4	113.2	4
BMM-12.5	112	6.3	115.5	6.3
BMM-20	115.7	10	119.2	10
BMM-32	121.7	16	125.2	16
BMM-40	125.7	20	129.2	20
BMM-50	130.7	25	134.2	25

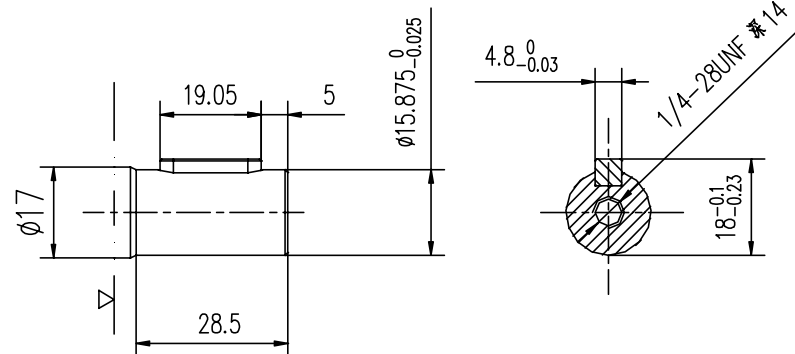
代号 连接形式	M、U 法兰		F 法兰	
	E(深)	U(深)	E(深)	U(深)
C	[M]3-M6 (10)	[U]3-1/4-28UNF (10)	[M]-	[U]-
D	G3/8 (12)	9/16-18UNF (12)	G3/8 (12)	9/16-18UNF (12)
T	G1/8 (8)	3/8-24UNF (8)	G1/8 (8)	3/8-24UNF (8)

BMM Shaft Extension Dimensions

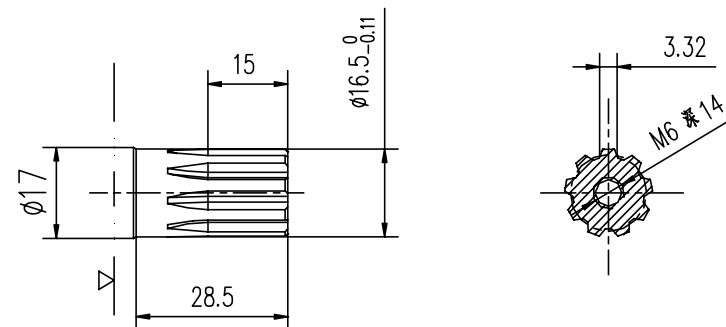
A轴：圆柱轴  $\phi 16$ ，  
平键 5X5X16



B轴：圆柱轴  $\phi 15.875$ ，  
平键 4.8X4.8X19.05

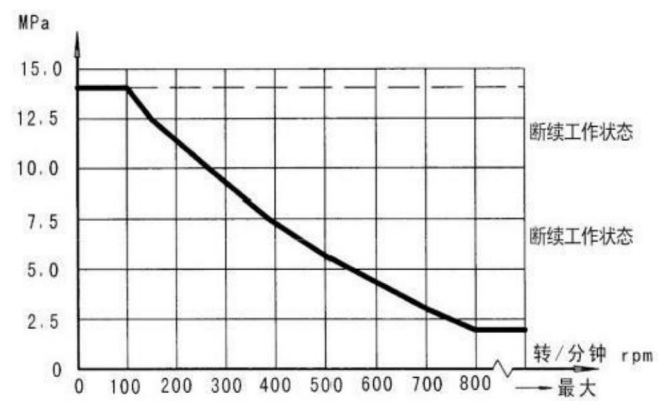
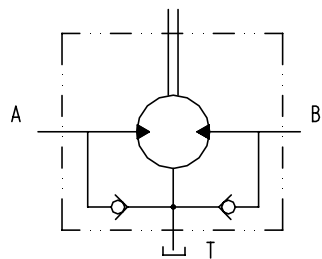


C轴：渐开线花键轴 B17X14  
DIN5482

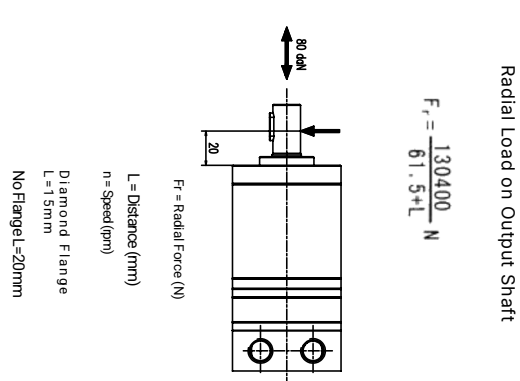


▷ 马达止口安装面

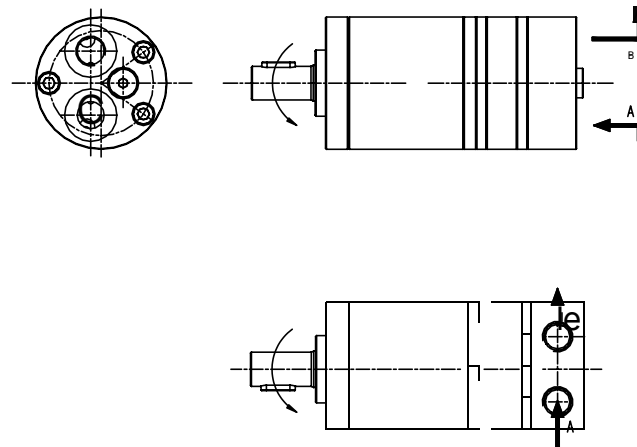
Allowable Pressure on Output Shaft Seal



When used without an external drain line, the pressure on the output shaft seal is slightly higher than the pressure in the return line. When an external drain line is used, the pressure on the output shaft seal is the same as the pressure in the drain line.



BMM/Rear Port BMM/Side Port



BMM Series Orbital Hydraulic Motor

# Ordering Information

1  2  3  4  5  6  7  8

POS.1	2	3		4		5		6		7		8					
Structure Code	Displacement	Flange / Pilot		Shaft Extension		Oil Port / Drain Port		Rotation Direction		Paint Option		Special Function					
BMM	8	M	3-M6Round Flange, Pilotφ31.5X5		A	Straight Shaftφ16, Parallel Key5x5x16,Length28.5,M6		E	G3/8,G1/8		None	Standard		None	Standard		
	12.5	U	3-1/4-28UNFRound Flange, Pilotφ31.5X5		B	Straight Shaftφ15.875, Parallel Key4.8x4.8x19.05,Length28.5, 1/4-28UNF		U	9/16-18UNF 'O'-ring,3/8-24UNF 'O'-ring		R	Reverse				None	Blue Paint
	20	F	2-φ9Diamond Flange, Pilotφ63X2		C	Involute Spline Shaftφ16.5,B17X14(DIN5482),Length 28.5,M6		1E	Rear PortG3/8,G1/8		B	Black Paint					
	32							1U	Rear Port9/16-18UNF 'O'-ring, 3/8-24UNF 'O'-ring		S	Silver Gray Paint					
	40																
50																	

Note: When using the ordering information, select the codes for motor structure, displacement, mounting flange, shaft extension, inlet/outlet ports, etc. from the colored positions on the left and write them to us in the above format. If the selected specification is not listed above or special requirements are needed, please contact us.

# CONTACT

# YUNLINK HYDRAULICS

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For product selection, quotation and OEM/ODM inquiries, please contact us.

## COMPANY

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**WhatsApp:** +86 155 3213 6555

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**LinkedIn:** [linkedin.com/in/peterbai-hydraulics](https://www.linkedin.com/in/peterbai-hydraulics)

### Location:

No. 5 Yucai Street, North Industrial Zone  
Ningjin County, Xingtai City  
Hebei Province, China

## WHEN SENDING AN INQUIRY, PLEASE INCLUDE:

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1. Product model
2. Thread size / connection type
3. Required pressure and flow rate
4. Quantity
5. Application or equipment model