

产品特点/ Product Feature

EGM 系列液压马达是本公司结合多年实践经验、在意大利技术基础上进行设计改进的一种新型产品。

EGM 液压马达主要特点如下：

- 1、由于活塞与摆缸不存在侧向力，活塞底部设计成静压平衡，活塞与曲轴之间通过滚动轴承传递扭力，减少了传力过程中的摩擦损失，因而EGM系列液压马达具有很高的机械效率，较高的起动扭矩（起动时机械效率0.92 以上）的特点。
- 2、平面配流器（专利技术）简单可靠，密封性能好，泄漏很少，活塞与摆缸之间用塑料活塞环密封无泄露，因而具有很高的容积效率（可达0.98）。
- 3、由于结构上减少了摩擦损失，提高了密封性能，因而低速稳定性很好，可以在1r/min 工况下平稳运转，调速范围大。
- 4、由于活塞与轴承套通过卡环贴牢不存在间隙，因而该系列液压马达可以作泵工况下运转。
- 5、该系列液压马达压力高，重量轻，体积小，比功率高。
- 6、由于结构简单，设计合理，采用负荷能力大的轴承，因而工作可靠，寿命长，噪音低，传动轴允许承受径向负荷，旋转方向可逆。

EGM series hydraulic motor is a new type of product of our company, which based on years practical experience and designed and improved the original products on the basis of Italian technologies. EGM hydraulic motor mainly has the following characteristics:

1. As the piston and the tilt cylinder have no side force, the piston bottom is designed to be static pressure balance. The torsional force is transferring between the piston and the crankshaft through rolling bearing, so the friction loss during the transferring process of force is reduced. Therefore, EGM series hydraulic motor has such features as: very high mechanical efficiency and comparatively high startup torque (mechanical efficiency of over 0.92 during startup).
2. The plane distributor (patented technology) is simple and reliable with perfect seal performance and almost no leakage. The plastic piston ring is used to seal between the piston and the tilt cylinder, so it has very high volumetric efficiency (can be as high as 0.98).
3. As the structure of this product has reduced friction loss and enhanced the seal performance, the product has perfect stability at low speed. It can stably run at 1r/min working condition and has big speed regulation range.
4. As the piston is jointed closely with bearing bushing without any clearance, this series of hydraulic motor can run at pump working condition.
5. This series of hydraulic motor has high pressure, light weight, small bulk and high specific power.
6. As this series hydraulic motor has simple structure, reasonable design and adopts bearing with big load ability, it can work reliably and has long life and low noise; the transmission shaft allows endure radial load and the rotational direction is reversible.

适用范围/ Applicable range

由于EGM系列液压马达具有上述一系列特点，因而它的适用范围广，可以在注塑机、轻工机械、工程机械、冶金设备、石油、煤矿、地质勘探、铁路、船舶、环保、机床、农机等各种机械的液压传动系统中应用。

As EGM series hydraulic motor has the above characteristics, it has wide application range. it can be applied in the hydraulic transmission systems of various types of machinery in plastic injection machine, light industry machine, engineering machine, metallurgical equipment, petroleum, coal mine, geological prospecting, railway, ship, environment protection, machine tool and agricultural machine industries.

产品标识说明/ Ordering Code



型号举例/ Example of Model

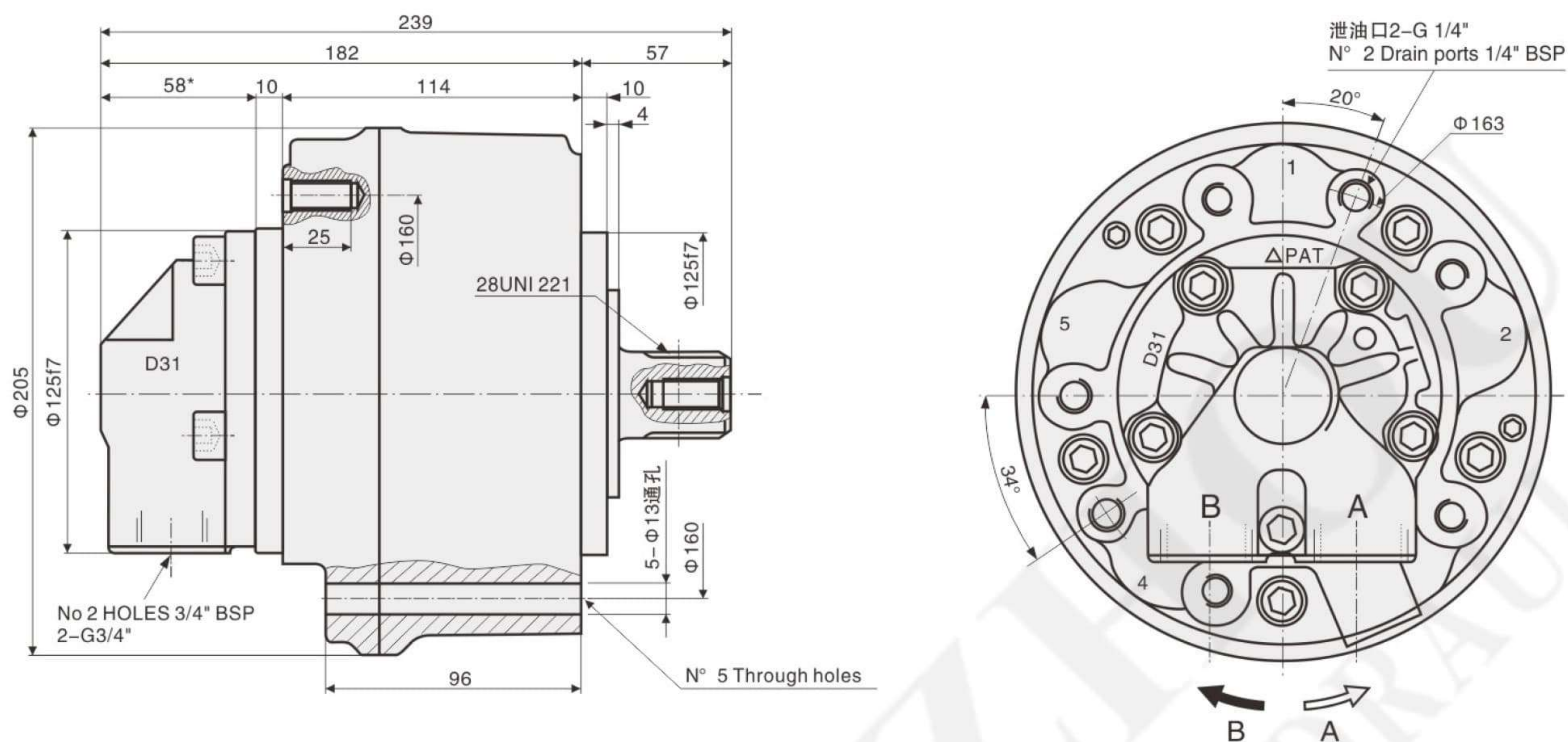
EGM2-420BD31表示基型为2系列EGM液压马达, 其名义排量为 425ml/r; 输出轴为平键轴, 配油器型号为 D31。订货时请按此填写完整的型号, 若有特殊要求请在订货合同中详细说明。

EGM2-420BD31 means the basic type is 2 series EGM hydraulic motor, and it's theoretical displacement is 425ml/r; output shaft 's type is flat key shaft, the distributor 's type is D31. When you place an order, please fill in the complete model according to this form. If you have special requirements please give a detailed description in the order contract.

技术参数/ Technical data

型号 Model	理论排量 Displacement (ml/r)	额定压力 Rated Pressure	尖峰压力 Peak Pressure	额定扭矩 Rated Torque	单位扭矩 Theoric Specific Torque	连续转速 Speed range	最高转速 Max.cont Speed	重量 Weight	
	ml/r	Mpa	Mpa	N.m	N.m/Mpa	r/min	r/min	kg	
EGM05-60	59	25	31.5	235	9.4	1~700	1000	22	
EGM05-75	74	25	31.5	295	11.8	1~700	1000		
EGM05-90	86	25	31.5	343	13.7	1~700	1000		
EGM05-110	115	25	31.5	458	18.3	1~650	900		
EGM05-130	129	25	31.5	513	20.5	1~650	900		
EGM05-150	151	25	31.5	600	24	1~650	900		
EGM05-170	166	25	31.5	660	26.4	1~600	800		
EGM05-200	191	25	28	760	30.4	1~600	800		
EGM1-100	99	25	31.5	385	15.4	1~550	1000	31	
EGM1-150	154	25	31.5	600	24	1~550	1000		
EGM1-175	172	25	31.5	670	26.8	1~550	900		
EGM1-200	201	25	31.5	785	31.4	1~550	800		
EGM1-250	243	25	31.5	950	38	1~450	700		
EGM1-300	290	25	31.5	1130	45.2	1~350	650		
EGM1-320	314	25	28	1225	49	1~350	600		
EGM1-350	340	25	28	1350	54	1~350	600		
EGM2-200	192	25	31.5	750	30	0.7~550	800	51	
EGM2-250	251	25	31.5	980	39.2	0.7~550	800		
EGM2-300	304	25	31.5	1188	47.5	0.7~500	750		
EGM2-350	347	25	31.5	1355	54.2	0.7~500	3750		
EGM2-420	425	25	31.5	1658	66.3	0.7~450	750		
EGM2-500	493	25	31.5	1923	76.9	0.7~450	700		
EGM2-600	565	25	30	2208	88.3	0.7~450	700		
EGM2-630	623	25	28	2433	97.3	0.7~400	650		
EGM3-425	426	25	31.5	1660	66.4	0.5~500	650	87	
EGM3-500	486	25	31.5	1895	75.8	0.5~450	600		
EGM3-600	595	25	31.5	2320	92.8	0.5~450	575		
EGM3-700	690	25	31.5	2700	108	0.5~400	500		
EGM3-800	792	25	31.5	3100	124	0.5~400	500		
EGM3-900	873	25	31.5	3400	136	0.5~350	400		
EGM3-1000	987	25	28	3850	154	0.5~300	350		
EGM4-600	616	25	31.5	2403	96.1	0.4~400	550		120
EGM4-800	793	25	31.5	3100	124	0.4~350	550		
EGM4-900	904	25	31.5	3525	141	0.4~325	450		
EGM4-1000	1022	25	31.5	4000	160	0.4~300	400		
EGM4-1100	1116	25	31.5	4350	174	0.4~275	400		
EGM4-1300	1316	25	28	5125	205	0.4~225	350		
EGM5-800	807	25	31.5	3150	126	0.3~325	450	175	
EGM5-1000	1039	25	31.5	4050	162	0.3~300	450		
EGM5-1200	1185	25	31.5	4625	185	0.3~300	400		
EGM5-1300	1340	25	31.5	5225	209	0.3~300	400		
EGM5-1450	1462	25	31.5	5700	228	0.3~275	350		
EGM5-1600	1634	25	31.5	6350	254	0.3~250	300		
EGM5-1800	1816	25	31.5	7075	283	0.3~250	300		
EGM5-2000	2007	25	31.5	7825	313	0.3~200	250		
EGM6-1700	1690	25	31.5	6600	264	0.2~250	400	275	
EGM6-2100	2127	25	31.5	8300	332	0.2~225	350		
EGM6-2500	2513	25	31.5	9800	392	0.2~200	300		
EGM6-3000	3041	25	31.5	11875	475	0.2~175	250		

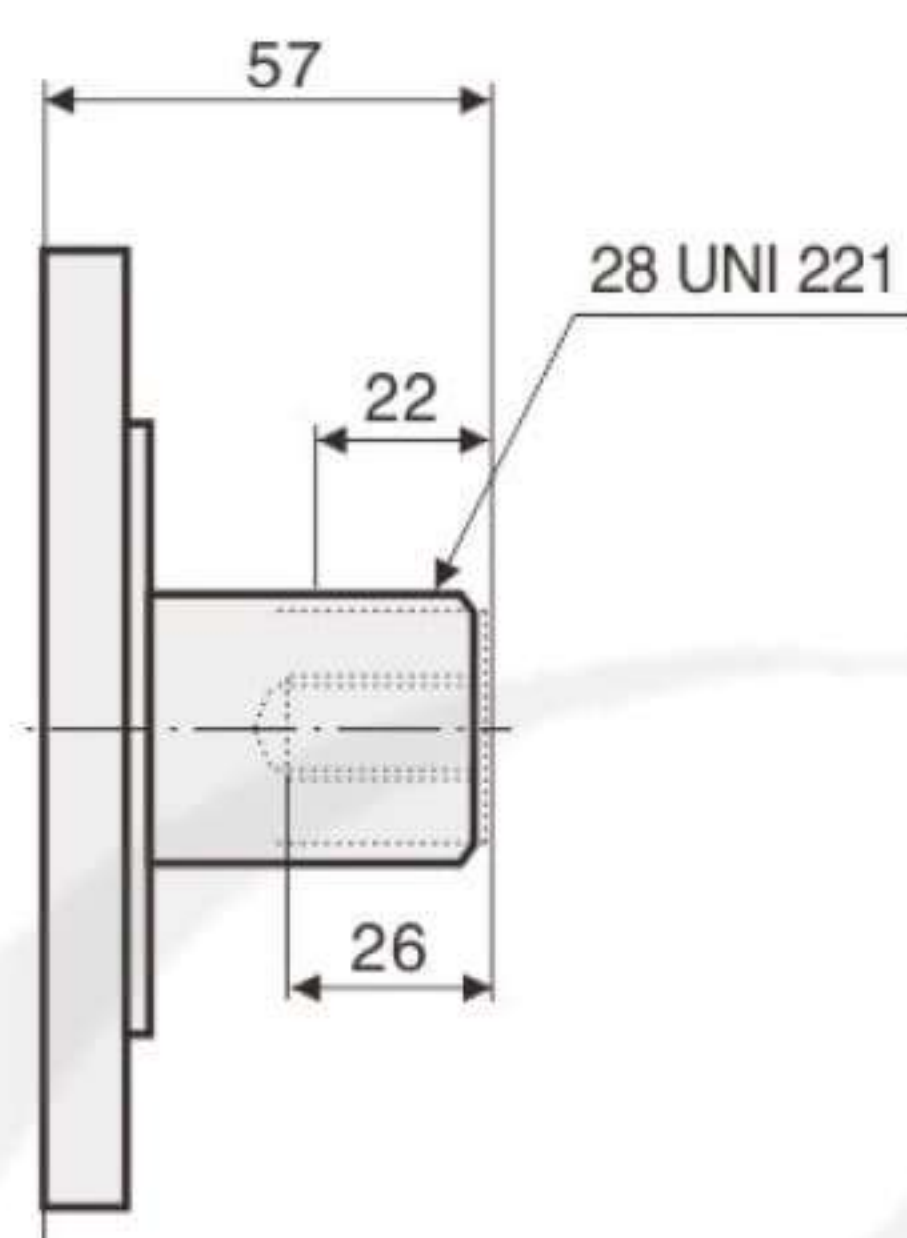
EGM05 外形及安装尺寸/EGM05 Installation Dimensions



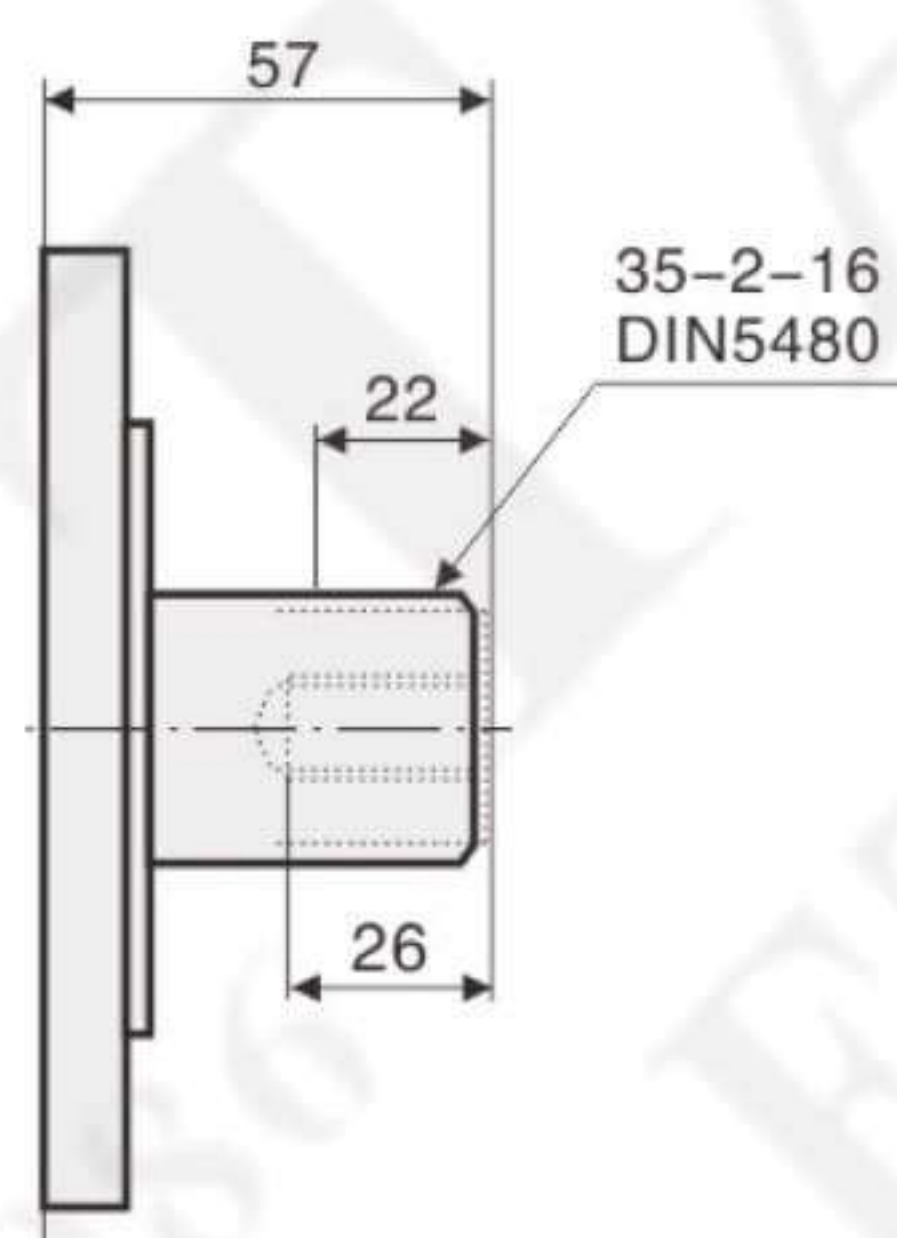
配油器长度 D31=58mm; D40(标准)=77mm
Distributor length: D31=58mm; D40(standard)=77mm

EGM05液压马达可完全替代GM05, INM05, XHS05
EGM05 can completely replace GM05, INM05, and XHS05.

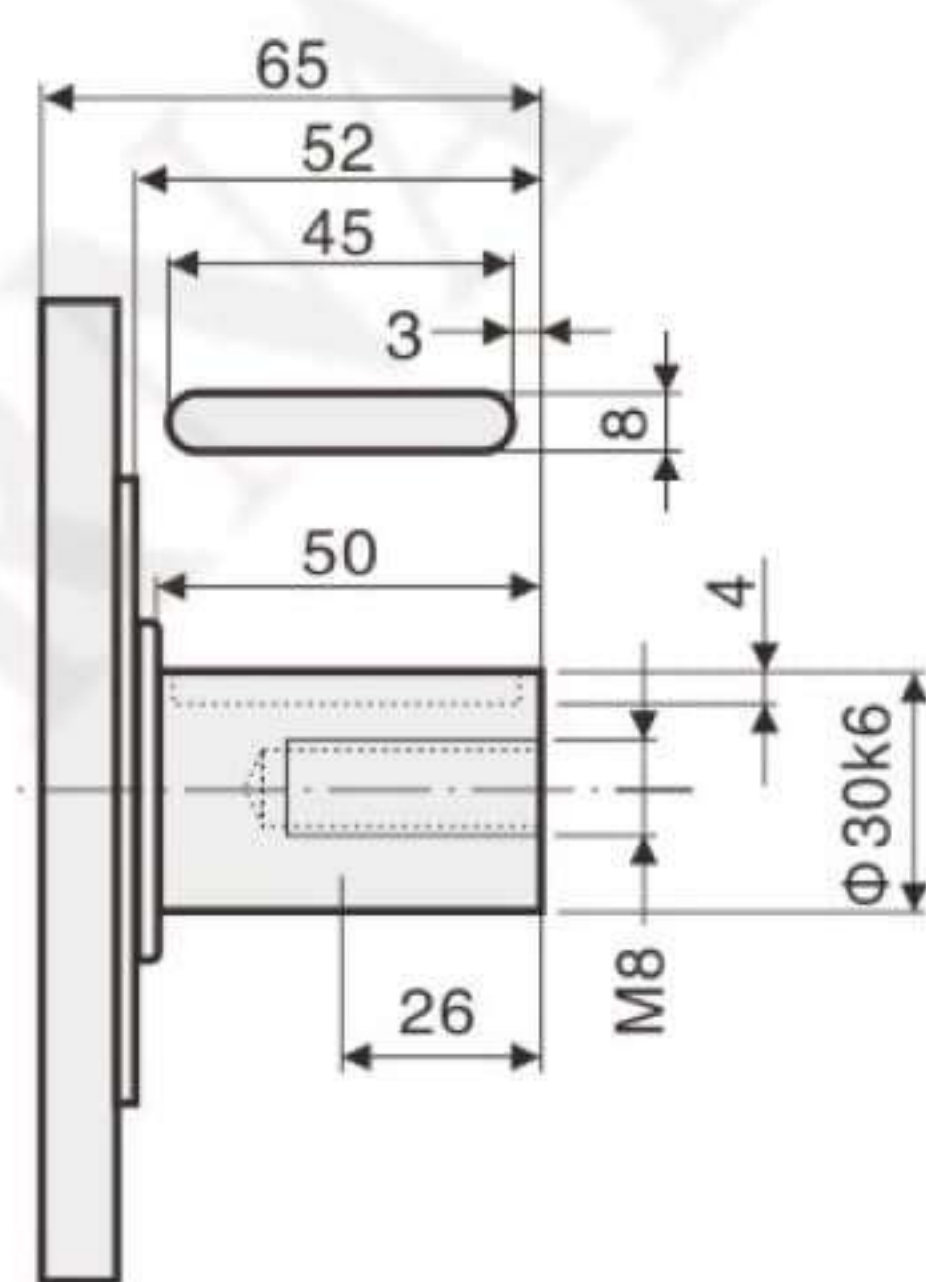
矩形外花键
Rectangular male Spline



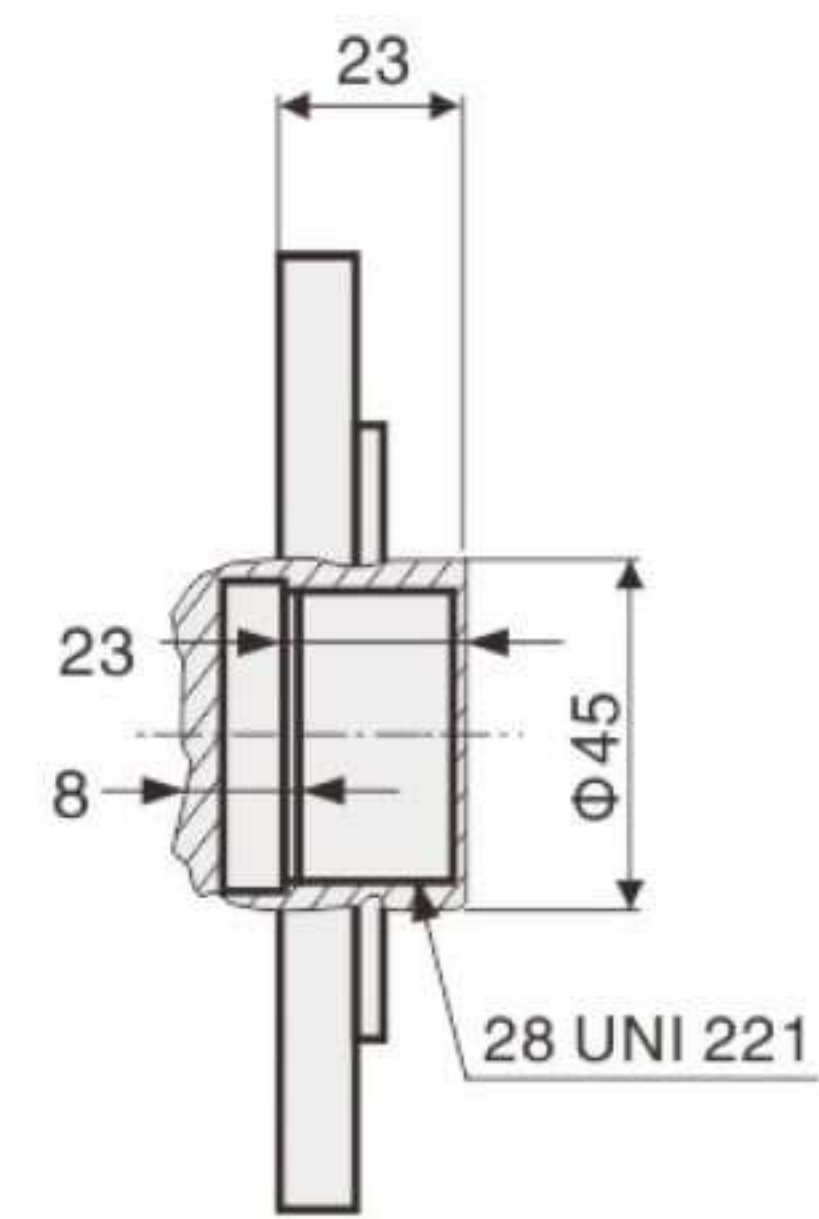
渐开线外花键 A
Involute outer Spline A



圆柱平键B
Cylinder Flat Key B



内花键 I
Female spline I

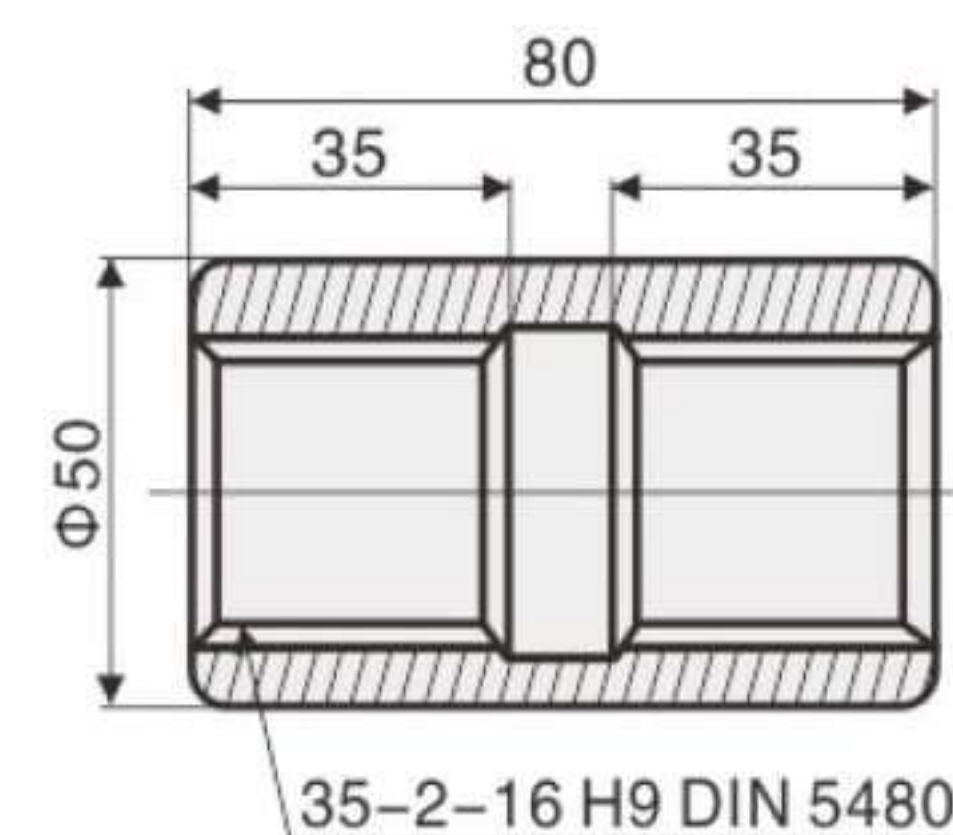


花键参数/ Spline parameters

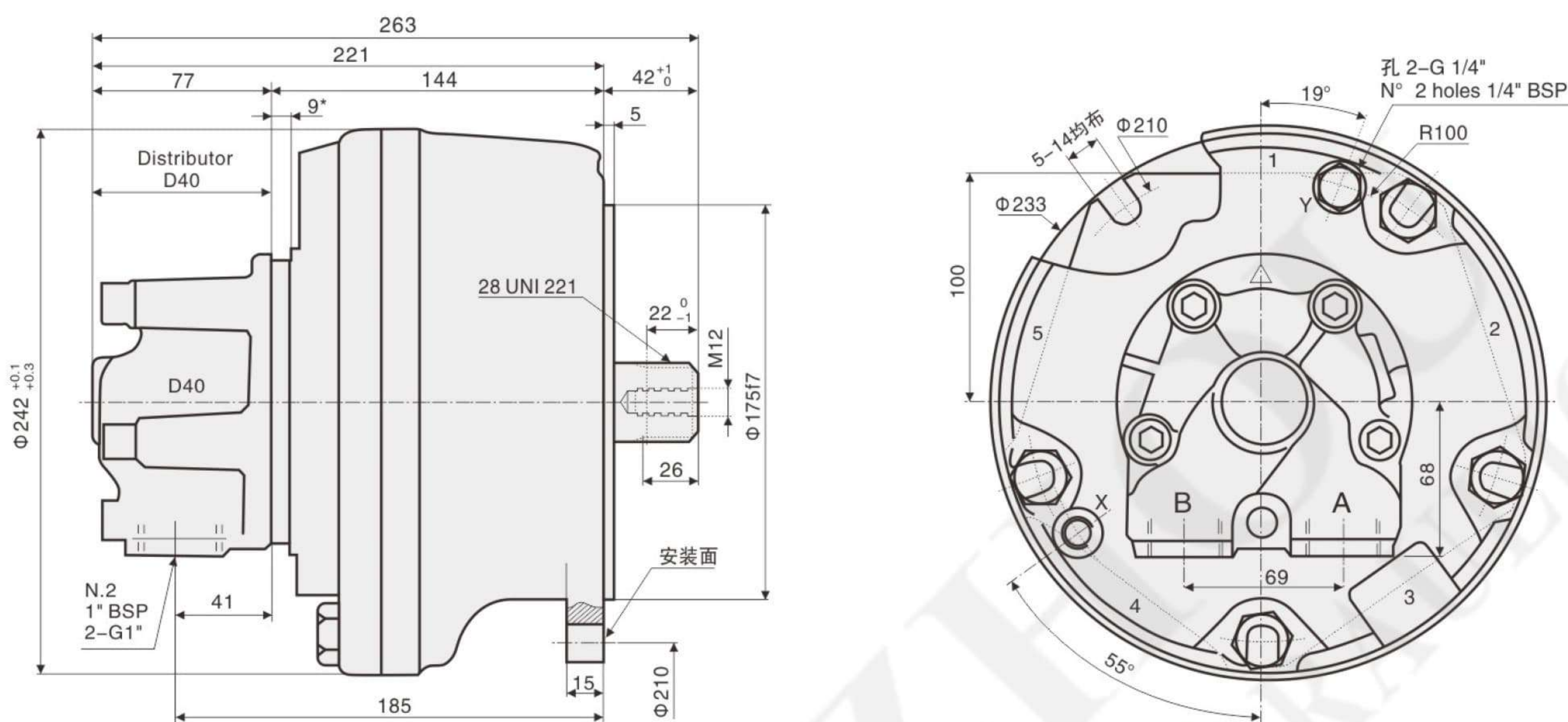
35-2-16 DIN5480	
d0	$\Phi 32.0$
d1	$\Phi 35.0^{+0.520}_{+0}$ H14
d2	$\Phi 31.0^{+0.160}_{+0}$ H11
A	$\Phi 3.5$
da	$\Phi 27.711$ H11
d3	$\Phi 34.6^{-0}_{-0.160}$ h11
d4	$\Phi 30.6^{-0}_{-0.520}$ h14
B	$\Phi 4.0$
db	$\Phi 39.000$ f8

28 UNI 221(6-28-34)DIN5463	
d1	$\Phi 28.0^{+0.021}_{+0}$ H7
d2	$\Phi 34.1^{+0.016}_{+0}$ H11
A	$7.0^{+0.028}_{+0.013}$ F7
d3	$\Phi 28.0^{-0.007}_{-0.020}$ g6
d4	$\Phi 34.0^{-0.065}_{-0.160}$ h14
B	$7.0^{-0.013}_{-0.026}$ f7

联轴器 Couplings

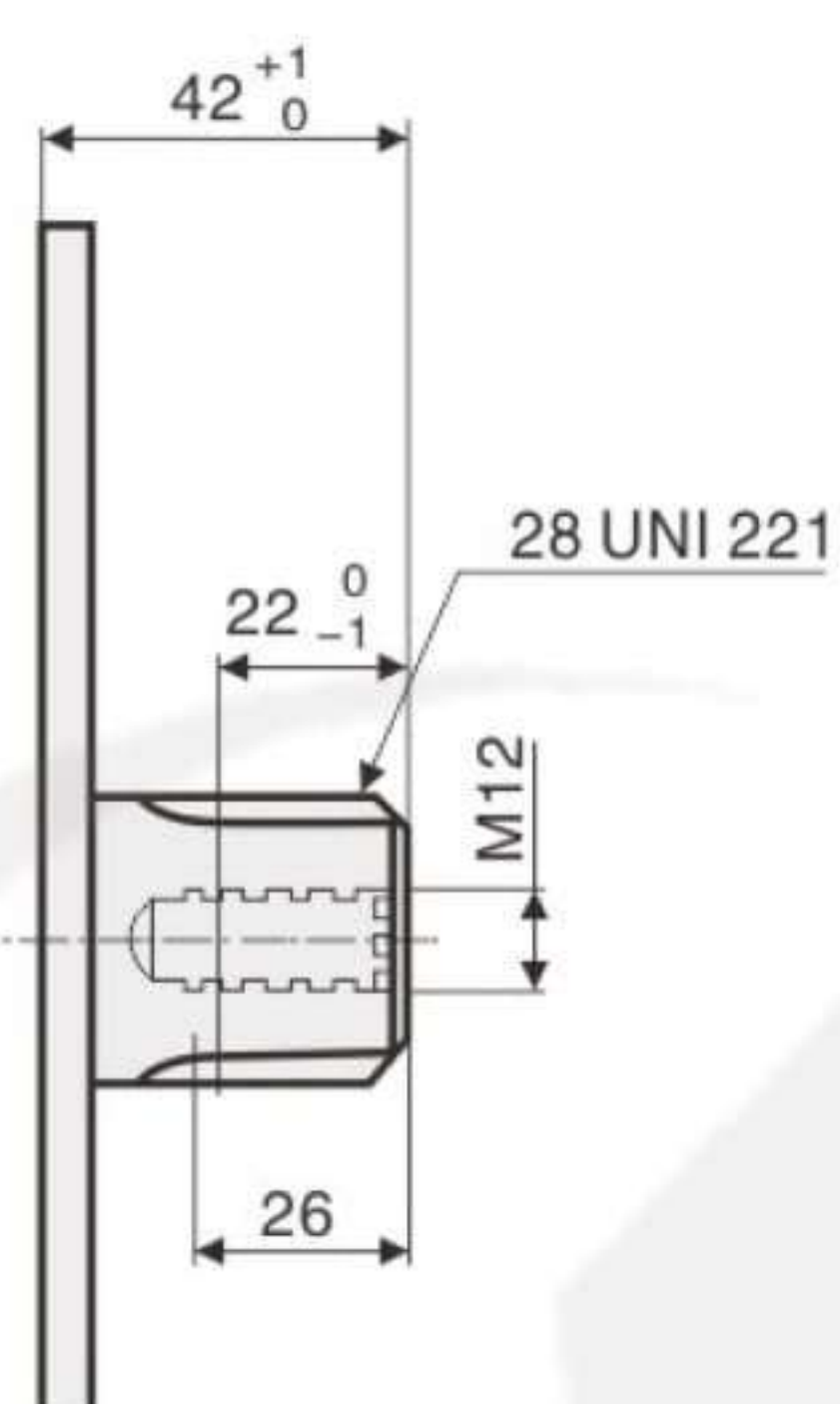


EGM1 外形及安装尺寸/EGM1 Installation Dimensions

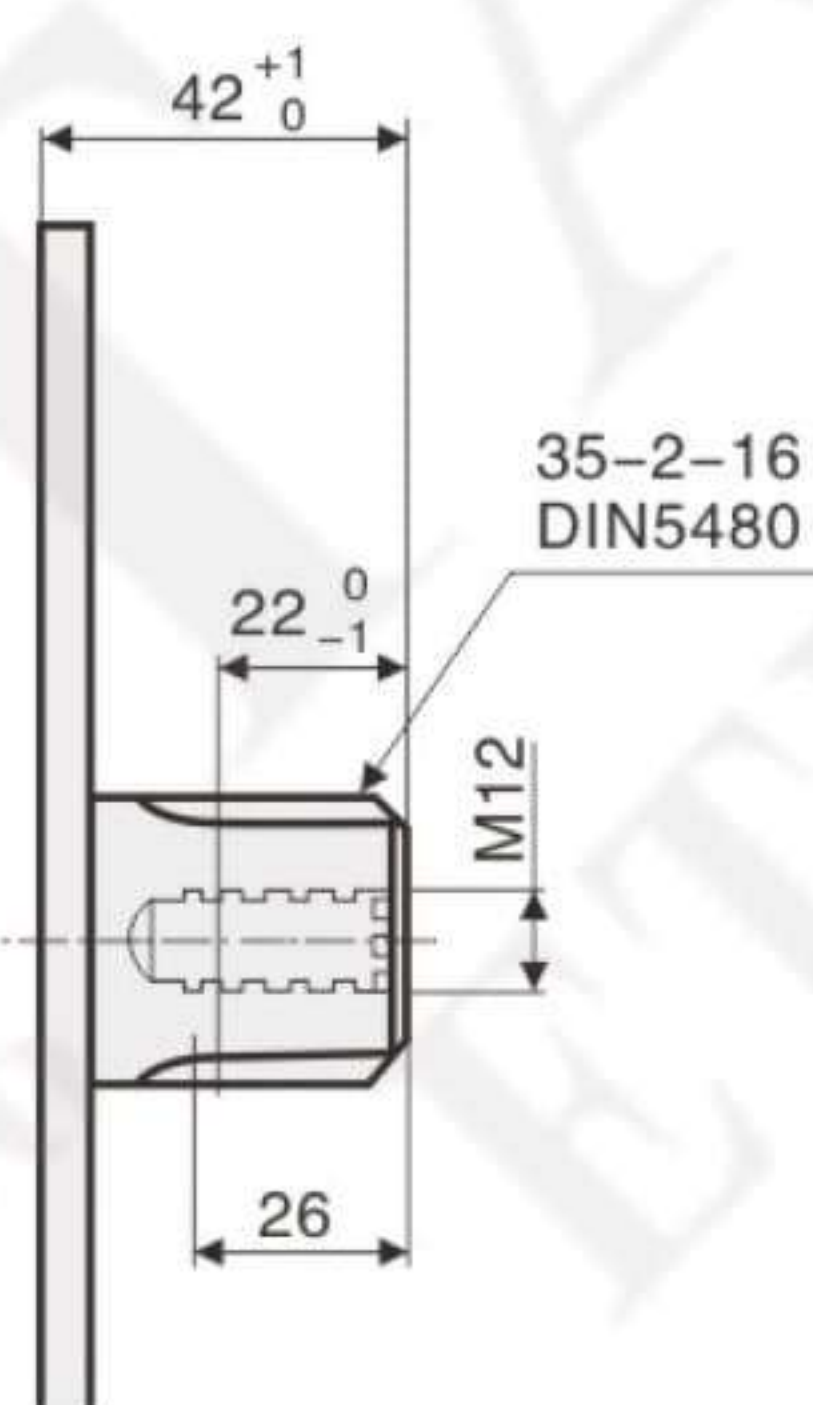


EGM1液压马达可完全替代GM1, INM1, XHS1
EGM1 can completely replace GM1, INM1, and XHS1.

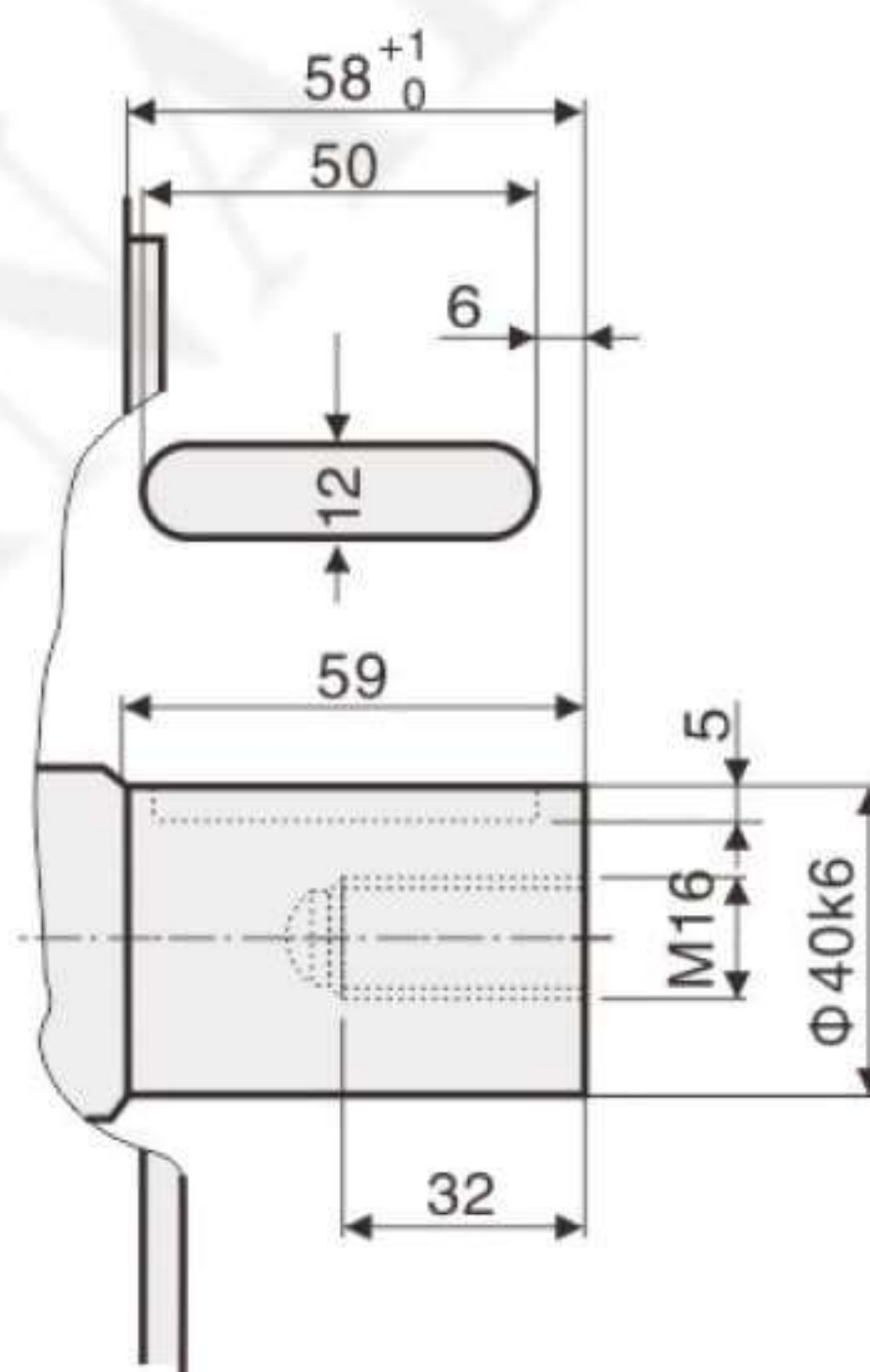
矩形外花键
Rectangular male Spline



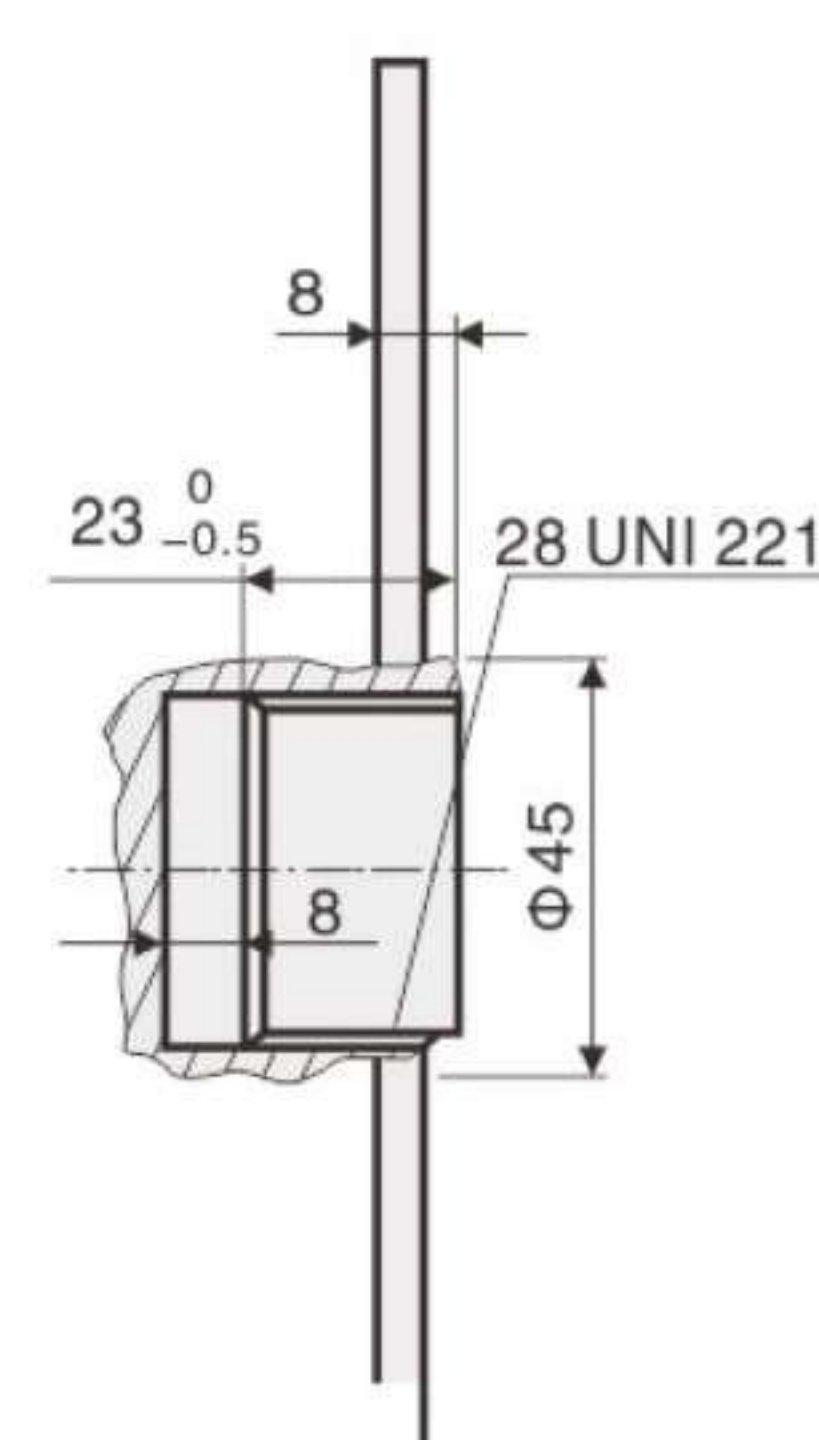
渐开线外花键 A
Involute outer Spline A



圆柱平键 B
Cylinder Flat Key B



内花键 I
Female spline I

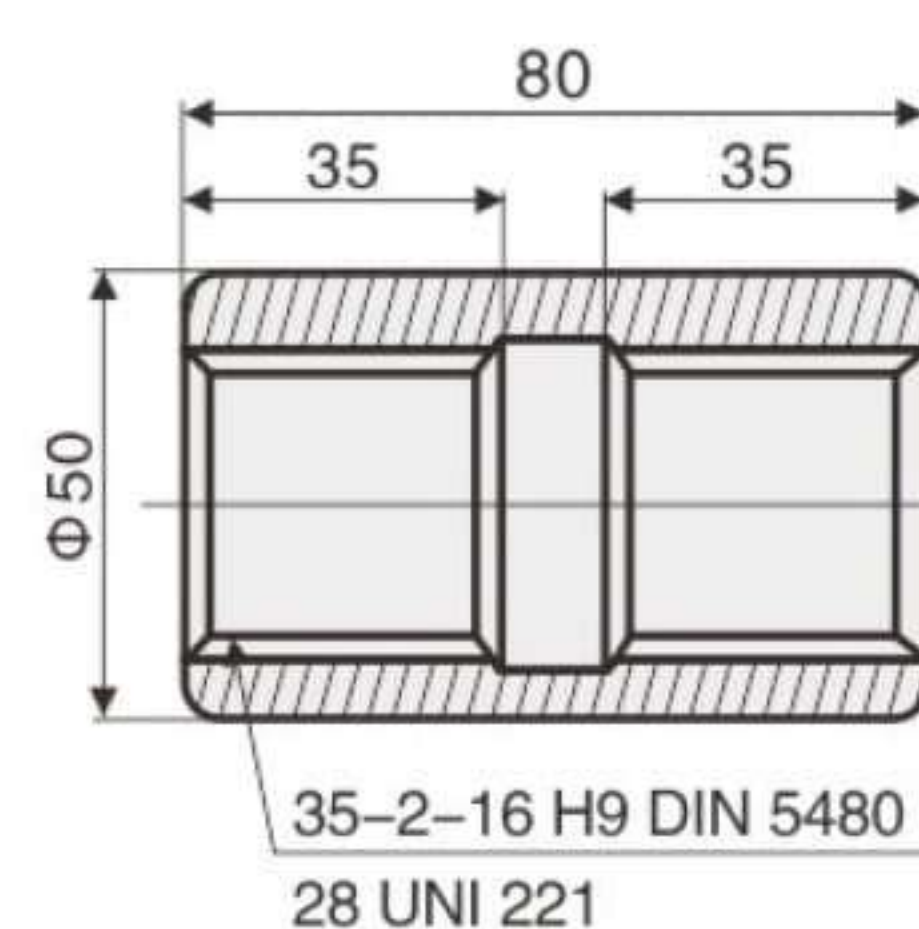


花键参数/ Spline parameters

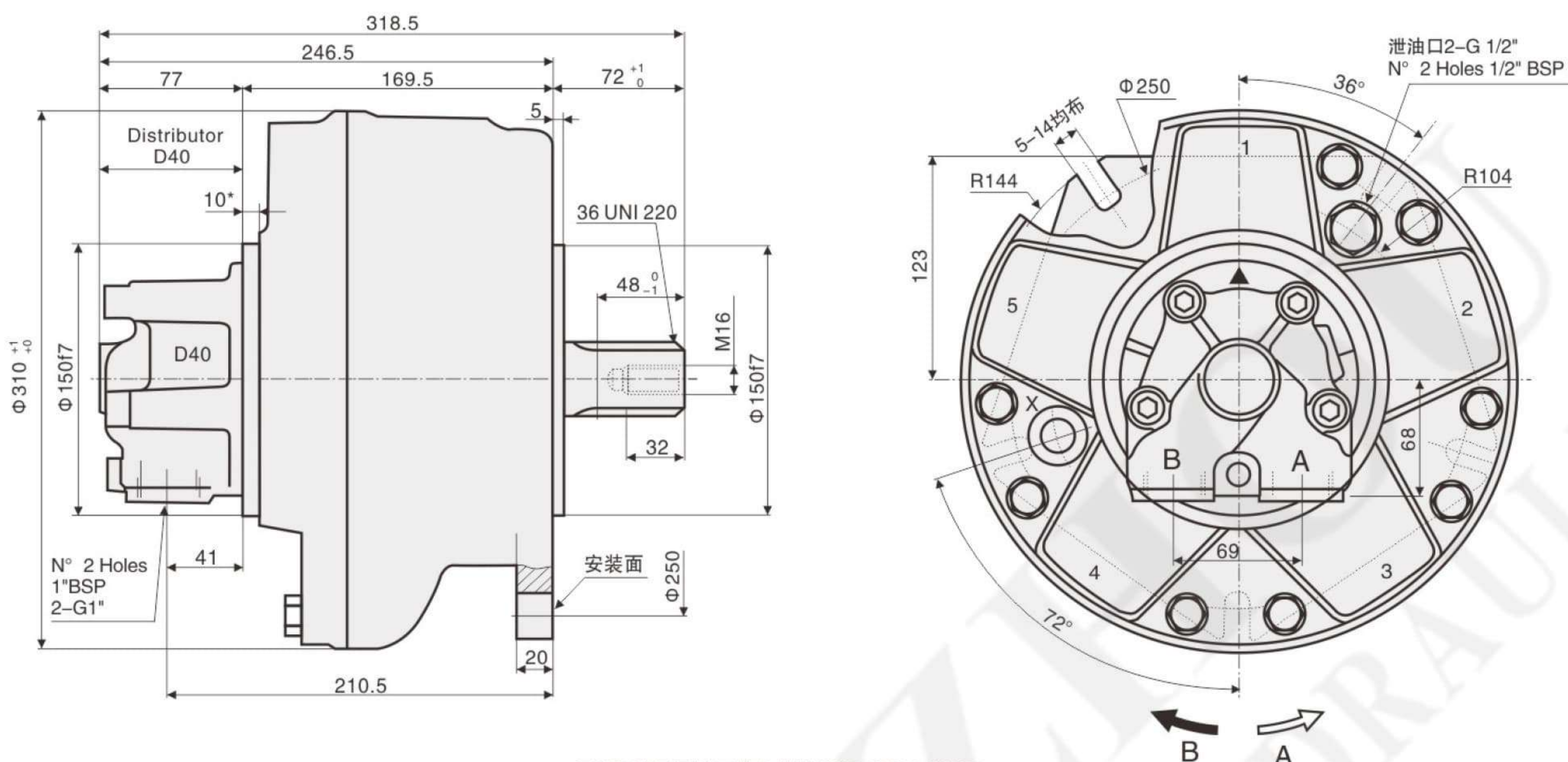
35-2-16 DIN5480	
d0	$\Phi 32.0$
d1	$\Phi 35.0^{+0.520}_{+0}$ H14
d2	$\Phi 31.0^{+0.160}_{+0}$ H11
A	$\Phi 3.5$
da	$\Phi 27.711$ H11
d3	$\Phi 34.6^{-0.160}_{-0}$ h11
d4	$\Phi 30.6^{-0.520}_{-0}$ h14
B	$\Phi 4.0$
db	$\Phi 39.000$ f8

28 UNI 221(6-28-34)DIN5463	
d1	$\Phi 28.0^{+0.021}_{+0}$ H7
d2	$\Phi 34.1^{+0.016}_{+0}$ H11
A	$7.0^{+0.028}$ F7
d3	$\Phi 28.0^{-0.007}_{-0.020}$ g6
d4	$\Phi 34.0^{-0.065}_{-0.160}$ h14
B	$7.0^{-0.028}$ f7

联轴器 Couplings

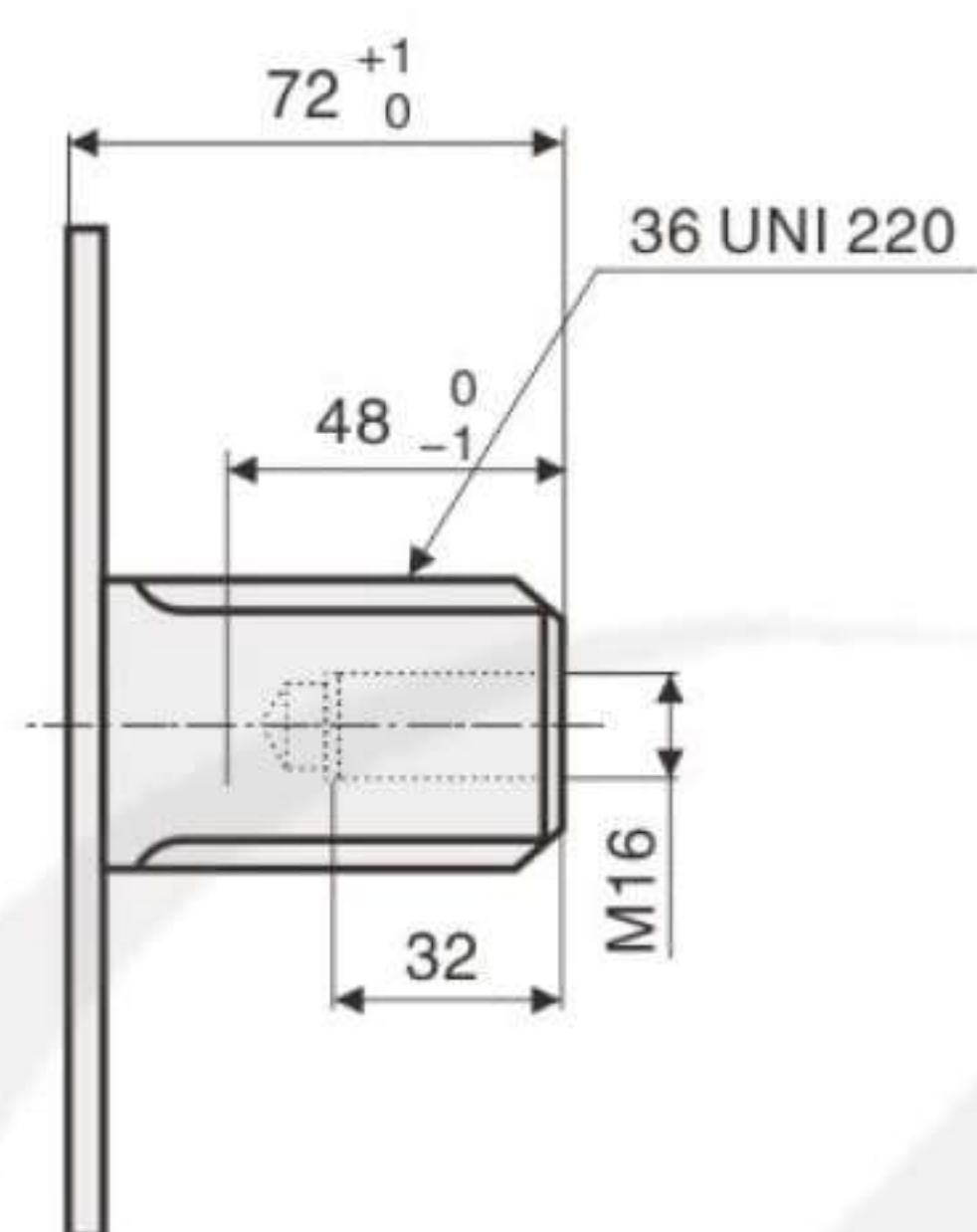


EGM2 外形及安装尺寸/EGM2 Installation Dimensions

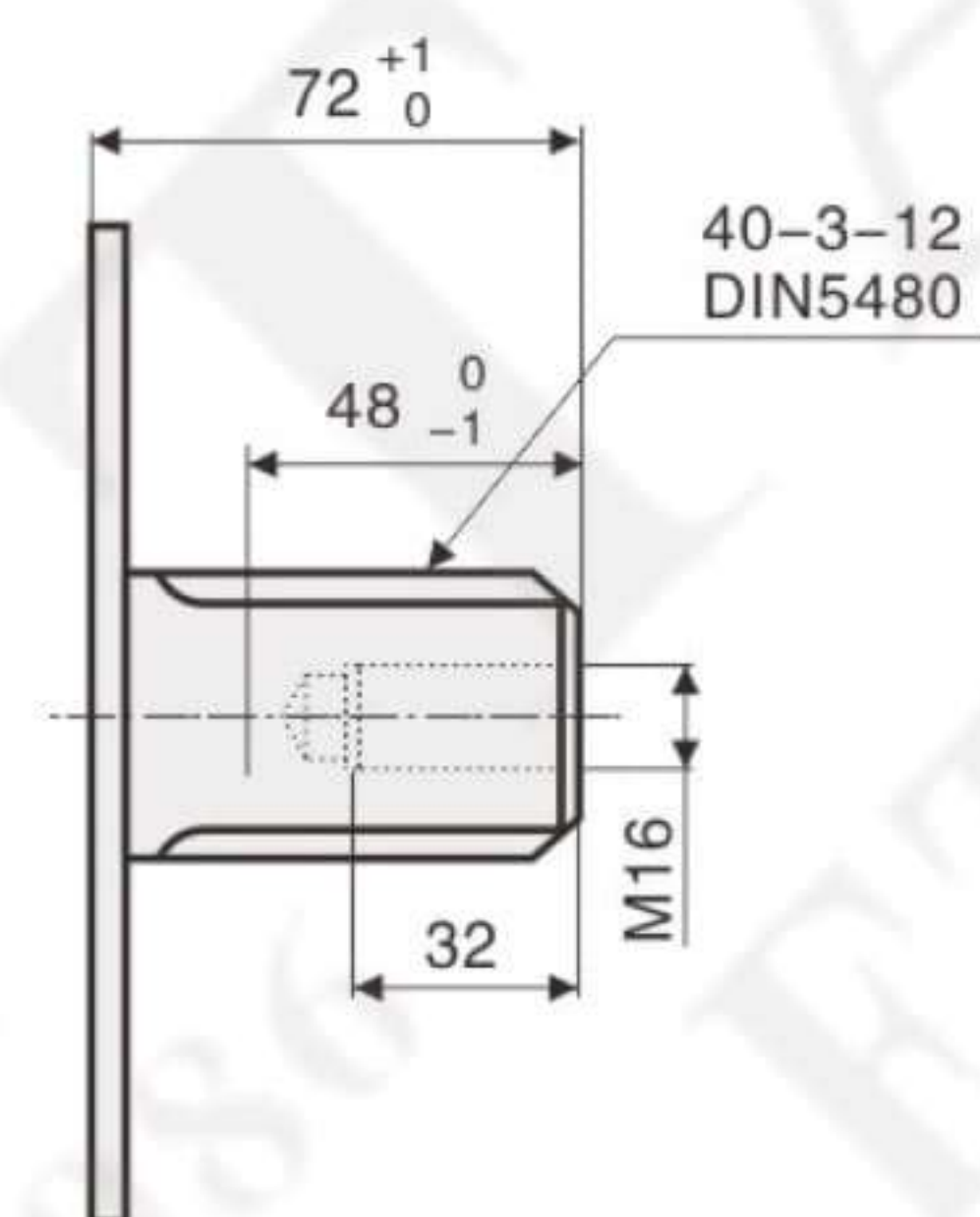


EGM2液压马达可完全替代GM2, INM2, XHS2
EGM2 can completely replace GM2, INM2, and XHS2.

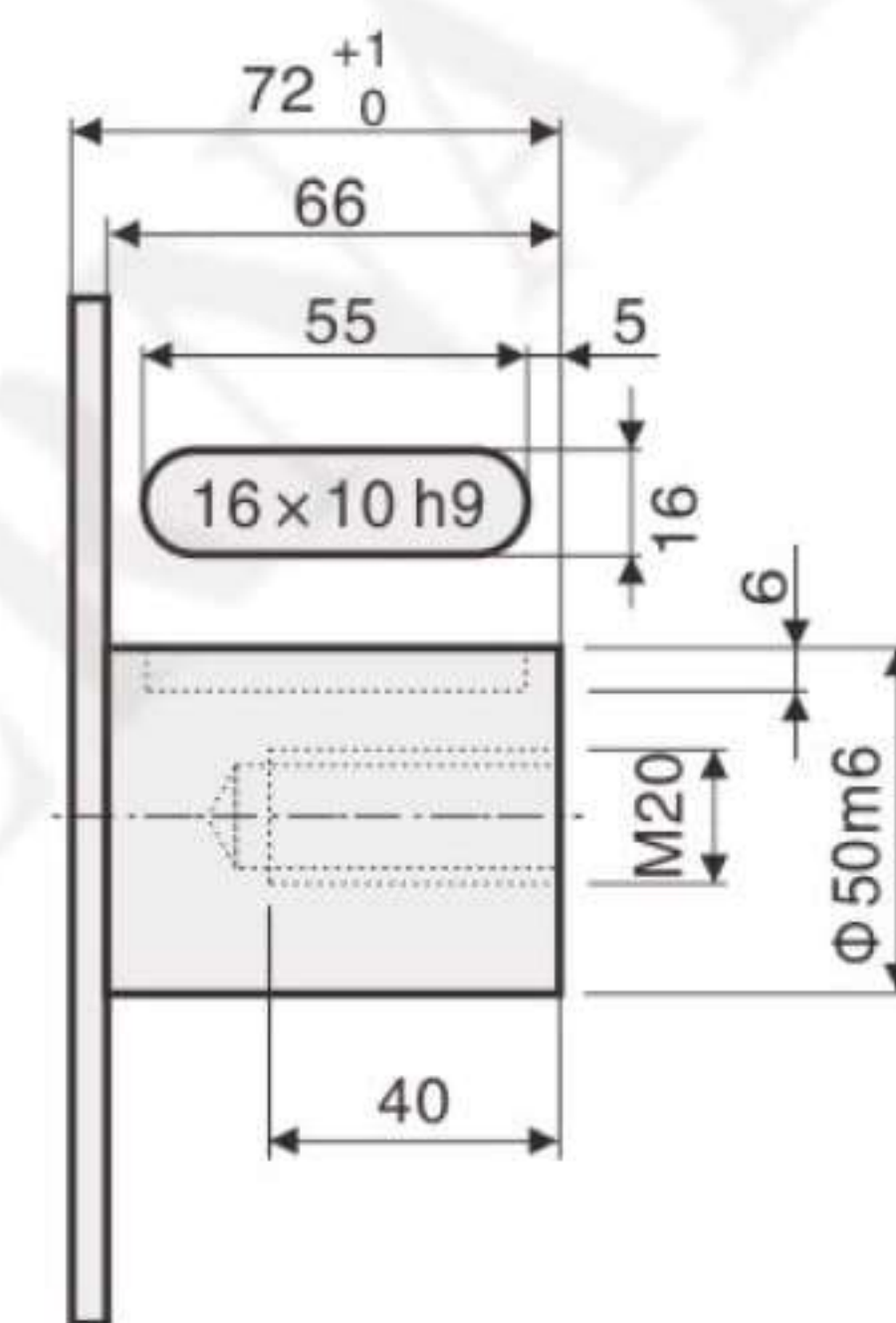
矩形外花键
Rectangular male Spline



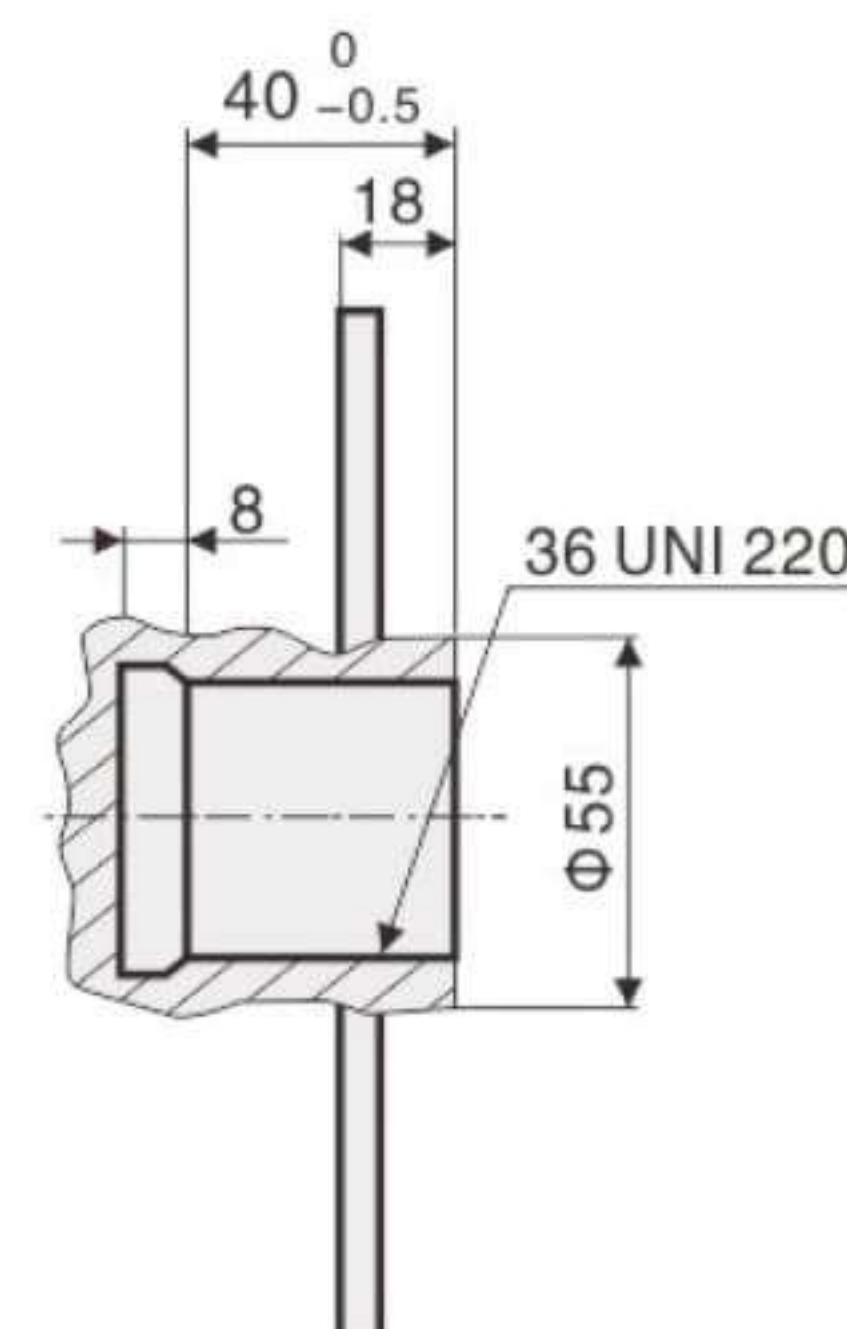
渐开线外花键 A
Involute outer Spline A



圆柱平键B
Cylinder Flat Key B



内花键 I
Female spline I

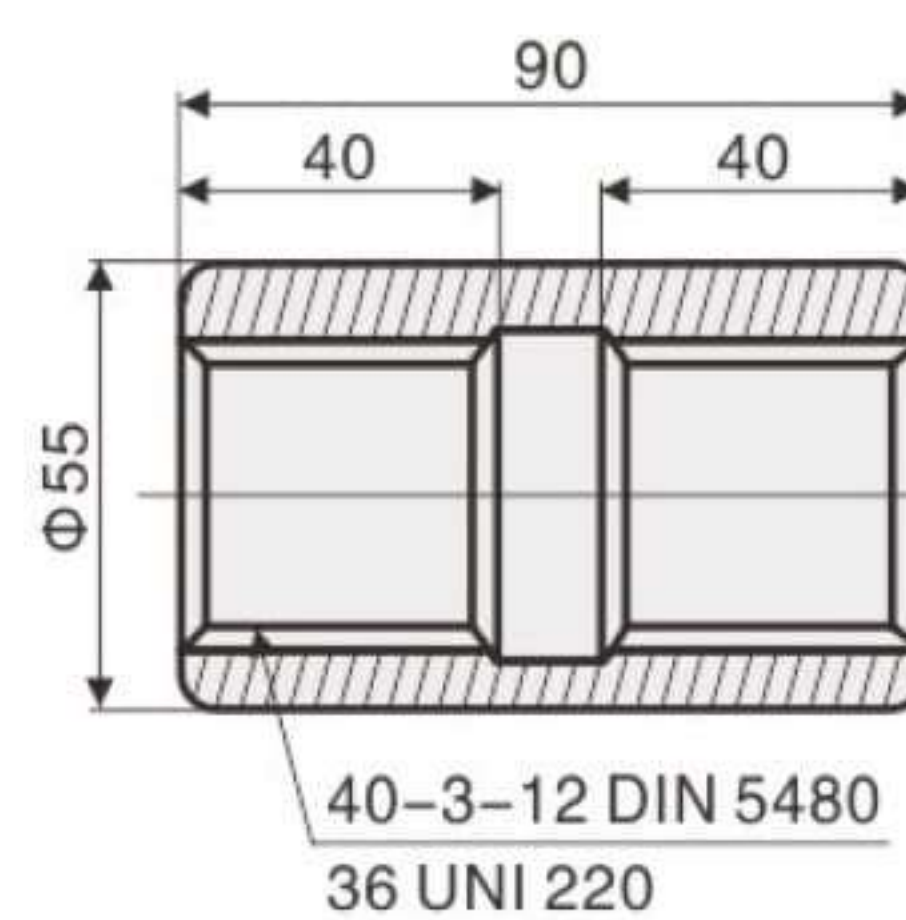


花键参数/ Spline parameters

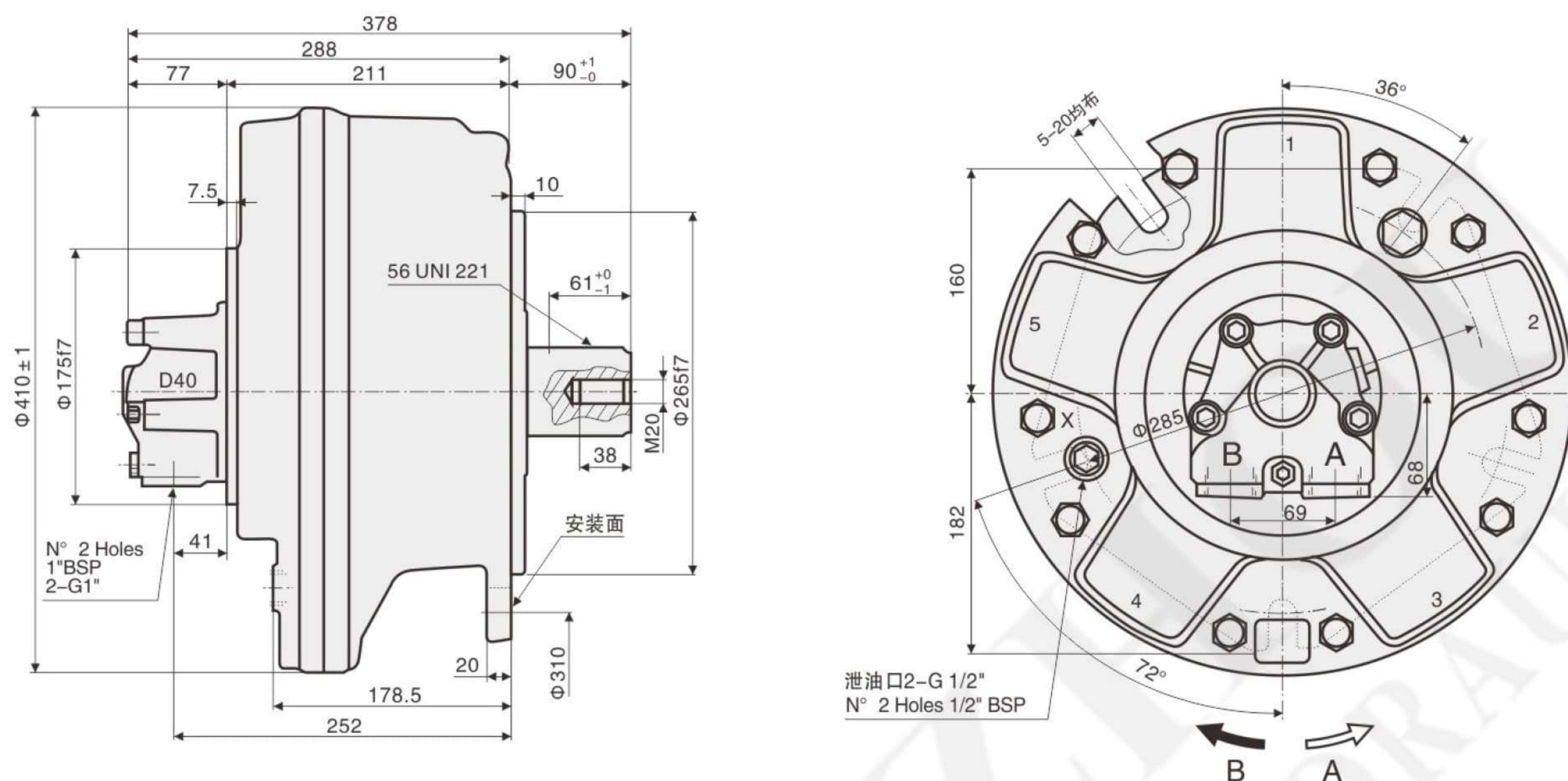
40-3-12 DIN5480	
d0	Φ 36.0
d1	Φ 40.0 ^{+0.620} ₊₀ H14
d2	Φ 34.0 ^{+0.160} ₊₀ H11
A	Φ 5.25
da	Φ 28.964 H11
d3	Φ 39.4 ⁻⁰ _{-0.160} h11
d4	Φ 33.4 ⁻⁰ _{-0.620} h14
B	Φ 6.0
db	Φ 45.989 f8

36 UNI 220 (8-36-40) DIN5462	
d1	Φ 36.0 ^{+0.025} ₊₀ H7
d2	Φ 40.0 ^{+0.016} ₊₀ H11
A	7.0 ^{+0.028} F7
d3	Φ 36.0 ^{-0.009} _{-0.025} g6
d4	Φ 40.0 ^{-0.065} _{-0.160} d11
B	7.0 ^{-0.028} f7

联轴器 Couplings

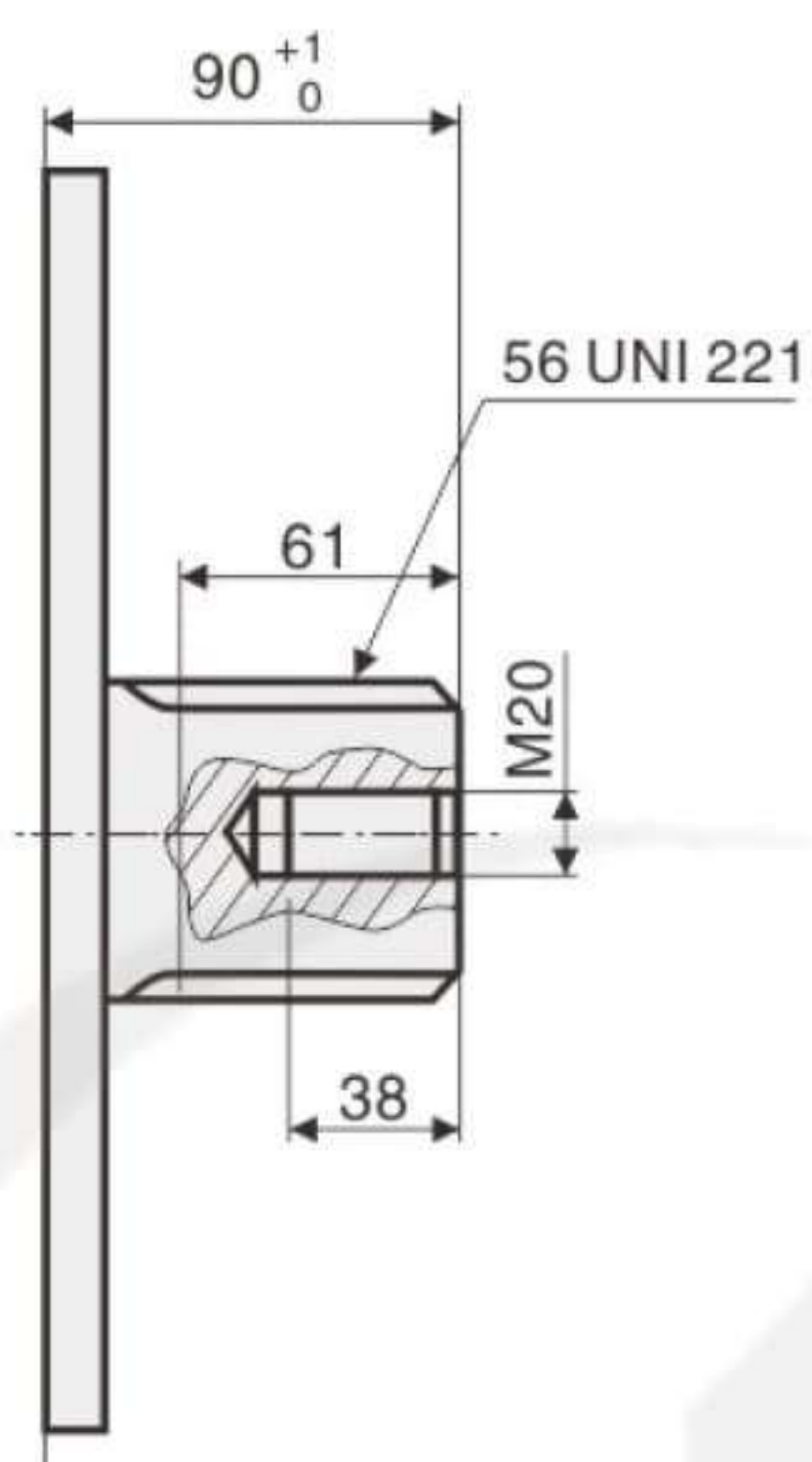


EGM4 外形及安装尺寸/EGM4 Installation Dimensions

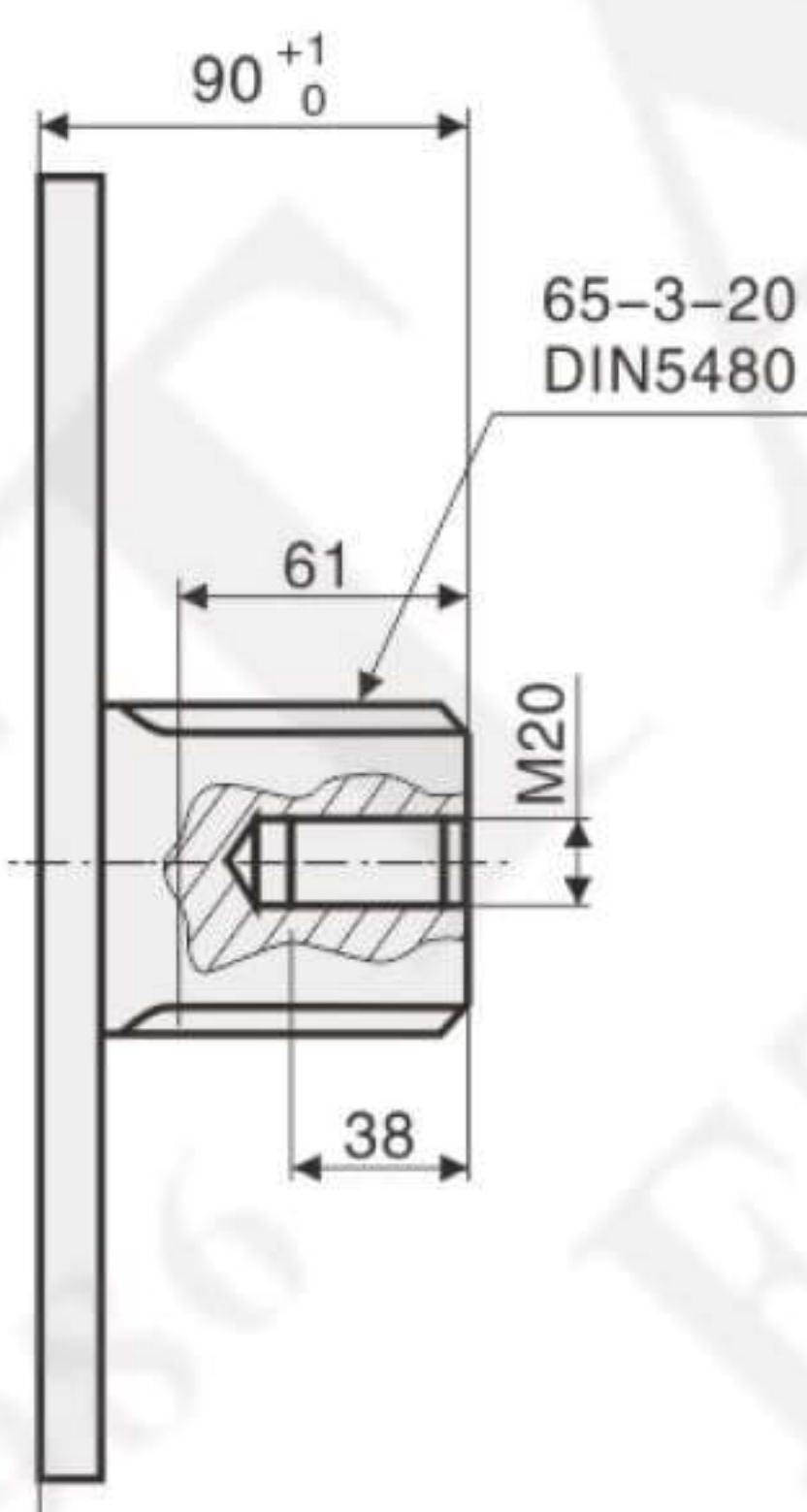


EGM4液压马达可完全替代GM4, INM4, XHS4
EGM4 can completely replace GM4, INM4, and XHS4.

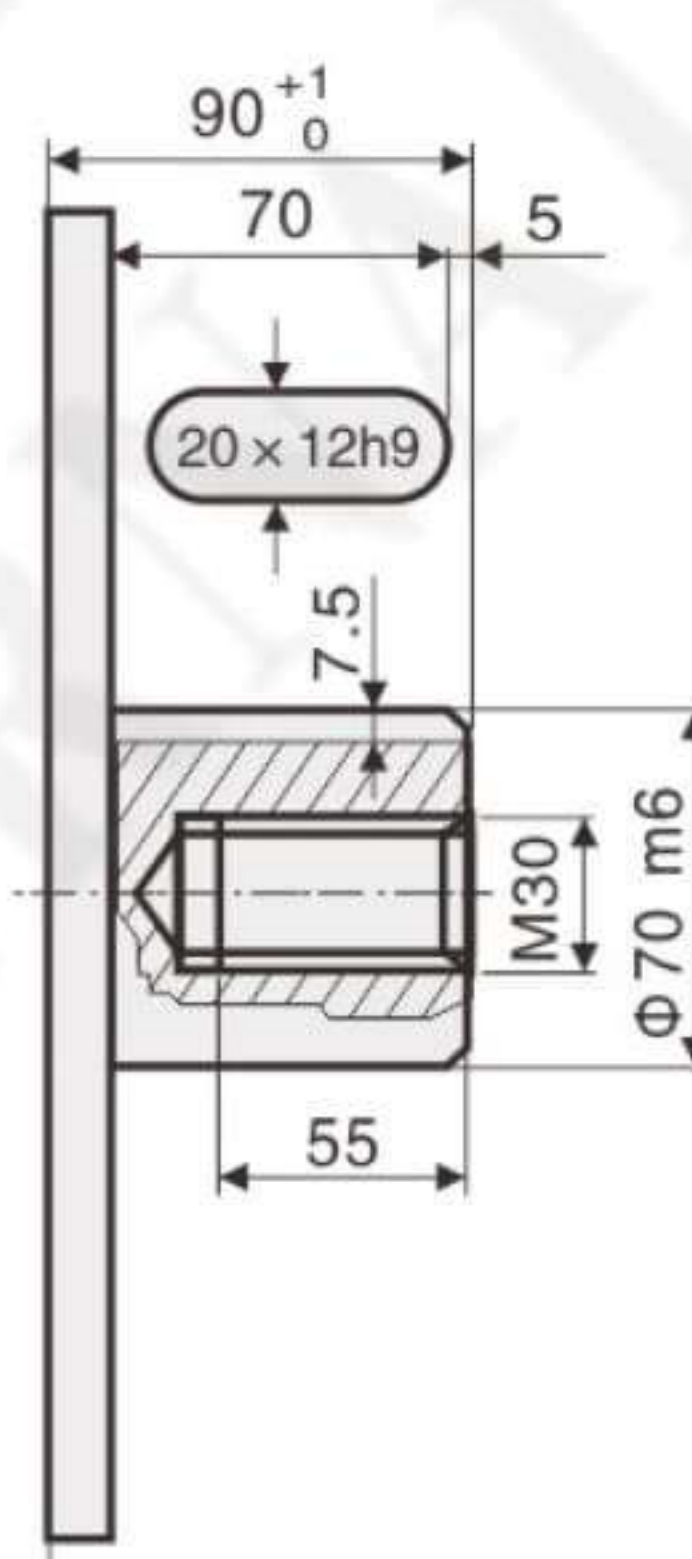
矩形外花键
Rectangular male Spline



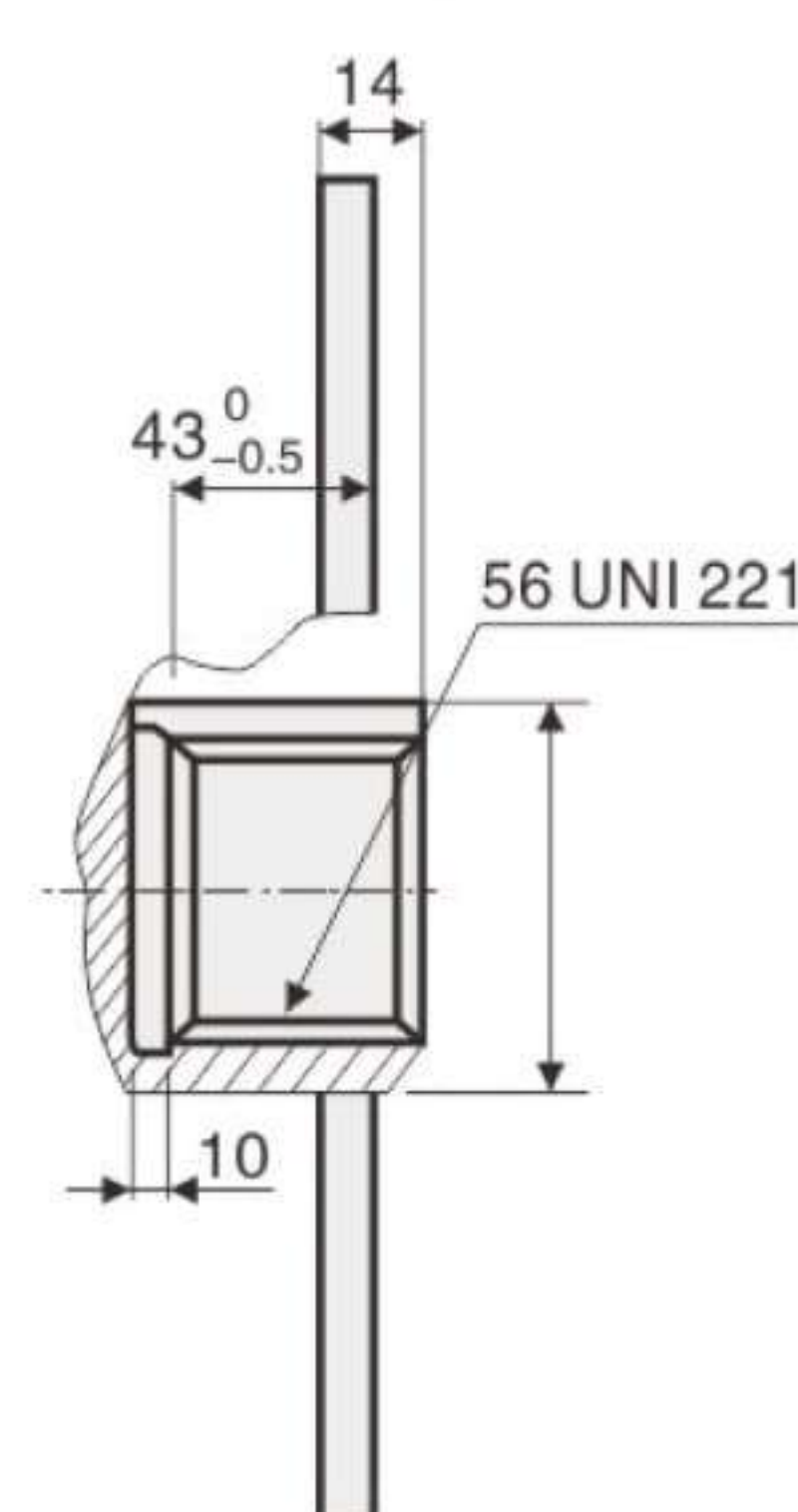
渐开线外花键 A
Involute outer Spline A



圆柱平键 B
Cylinder Flat Key B



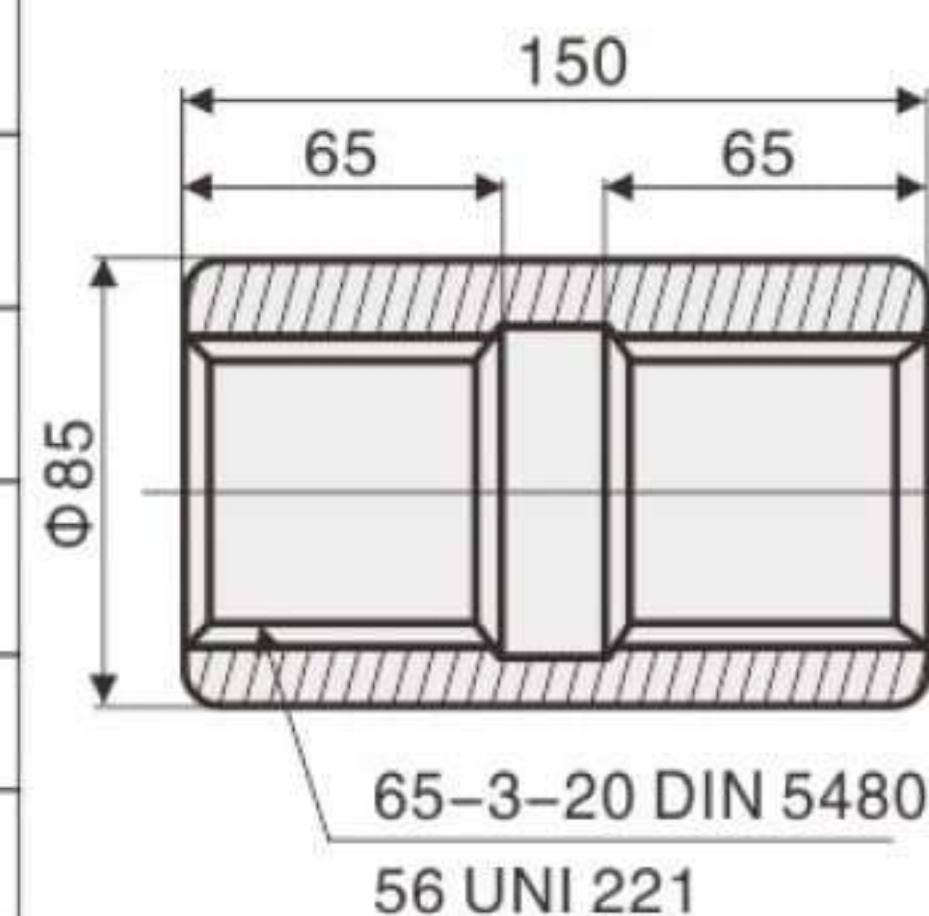
内花键 I
Female spline I



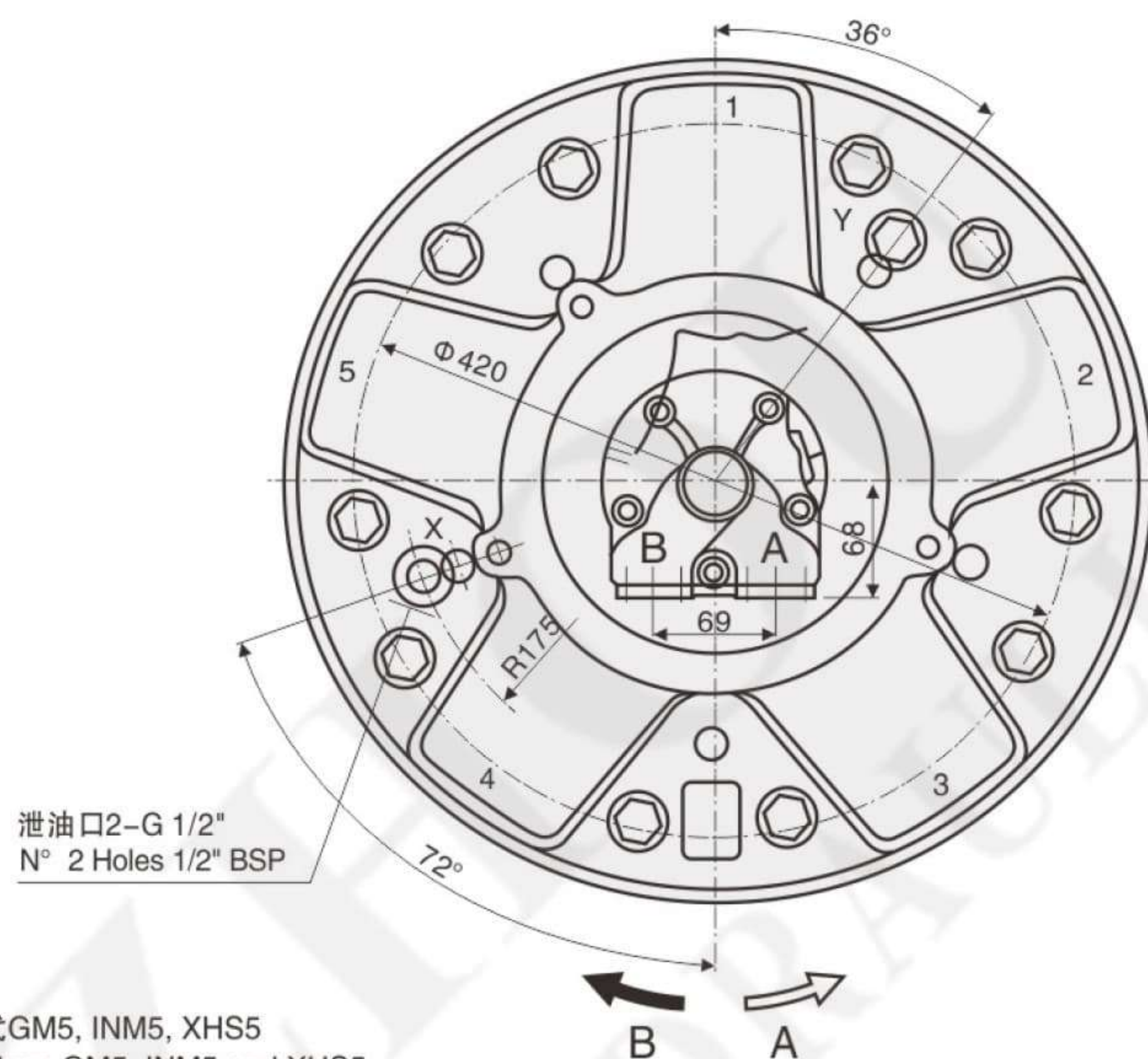
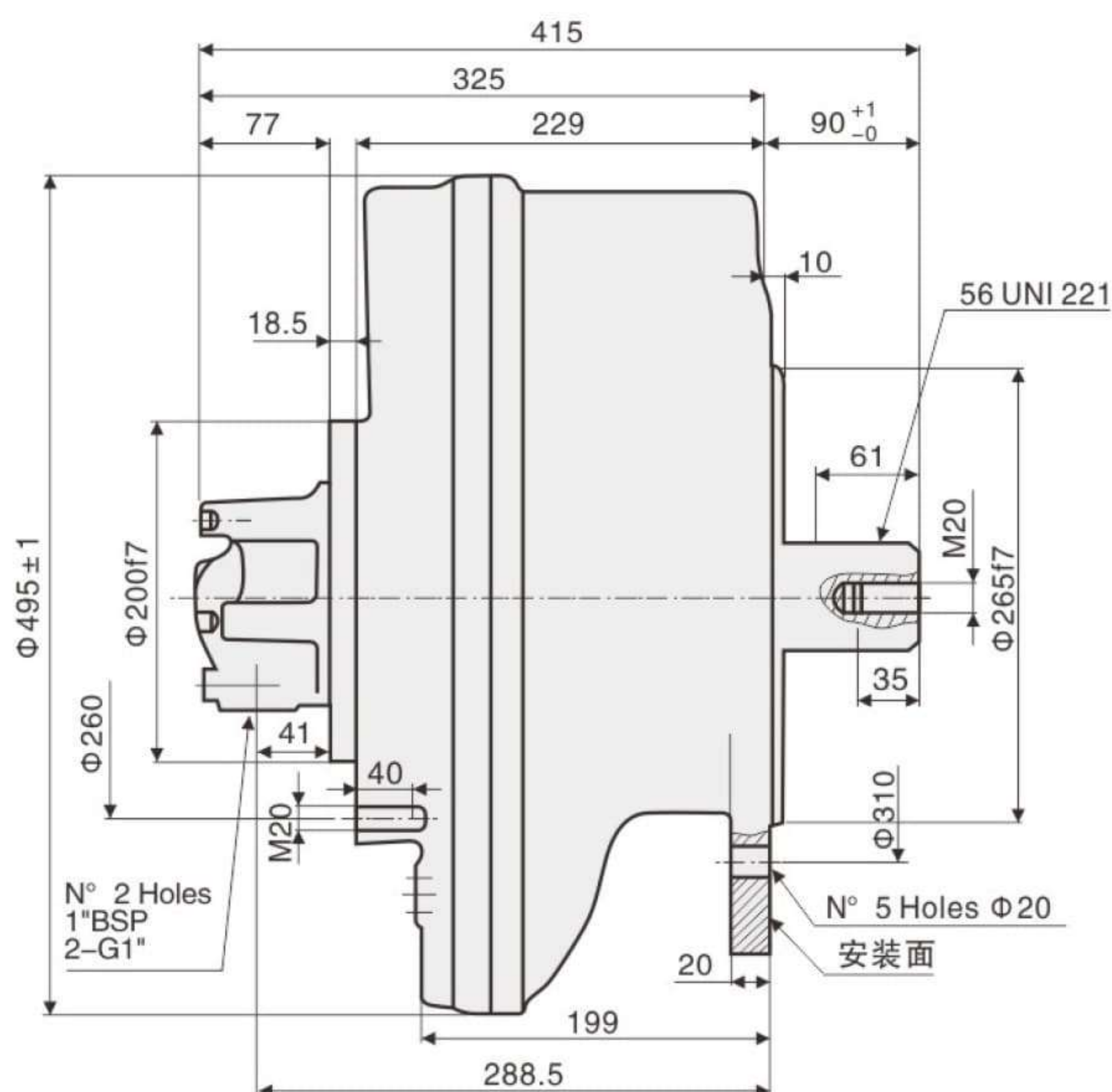
花键参数/ Spline parameters

DIN	65-3-20 DIN5480	55-3-26 DIN5428	55-3-17 DIN5428	56 UNI 221(10-56-65 DIN 5428)
d0	Φ60.0	Φ52.0	Φ51.0	d1 Φ56.0 ^{+0.030} ₊₀ H7
d1	Φ65.0 ^{+0.740} ₊₀ H14	Φ55.0 ^{+0.300} ₊₀ H12	Φ55.0 ^{+0.740} ₊₀ H14	d2 Φ65.0 ^{+0.190} ₊₀ H11
d2	Φ59.0 ^{+0.190} ₊₀ H11	Φ50.0 ^{+0.160} ₊₀ H11	Φ49.0 ^{+0.160} ₊₀ H11	A 10.0 ^{+0.028} _{+0.013} F7
A	Φ5.25	Φ3.5	Φ5.25	d3 Φ56 ^{-0.010} _{-0.029} g6
da	Φ54.101 H11	Φ46.902 H10	Φ43.807 H11	d4 Φ65.0 ^{-0.100} _{-0.190} H11
d3	Φ64.4 ^{-0.190} ₀ h11	Φ54.5 ^{-0.190} ₀ h11	Φ54.4 ^{-0.190} ₀ h11	B 10 ^{-0.028} _{-0.013} f7
d4	Φ58.4 ^{-0.740} ₀ h14	Φ49.0 ^{-0.300} ₀ h12	Φ48.4 ^{-0.620} ₀ h14	
B	Φ6.0	Φ3.5	Φ6.0	
db	Φ70.999 f8	Φ56.953 e9	Φ60.873 f8	

联轴器 Couplings

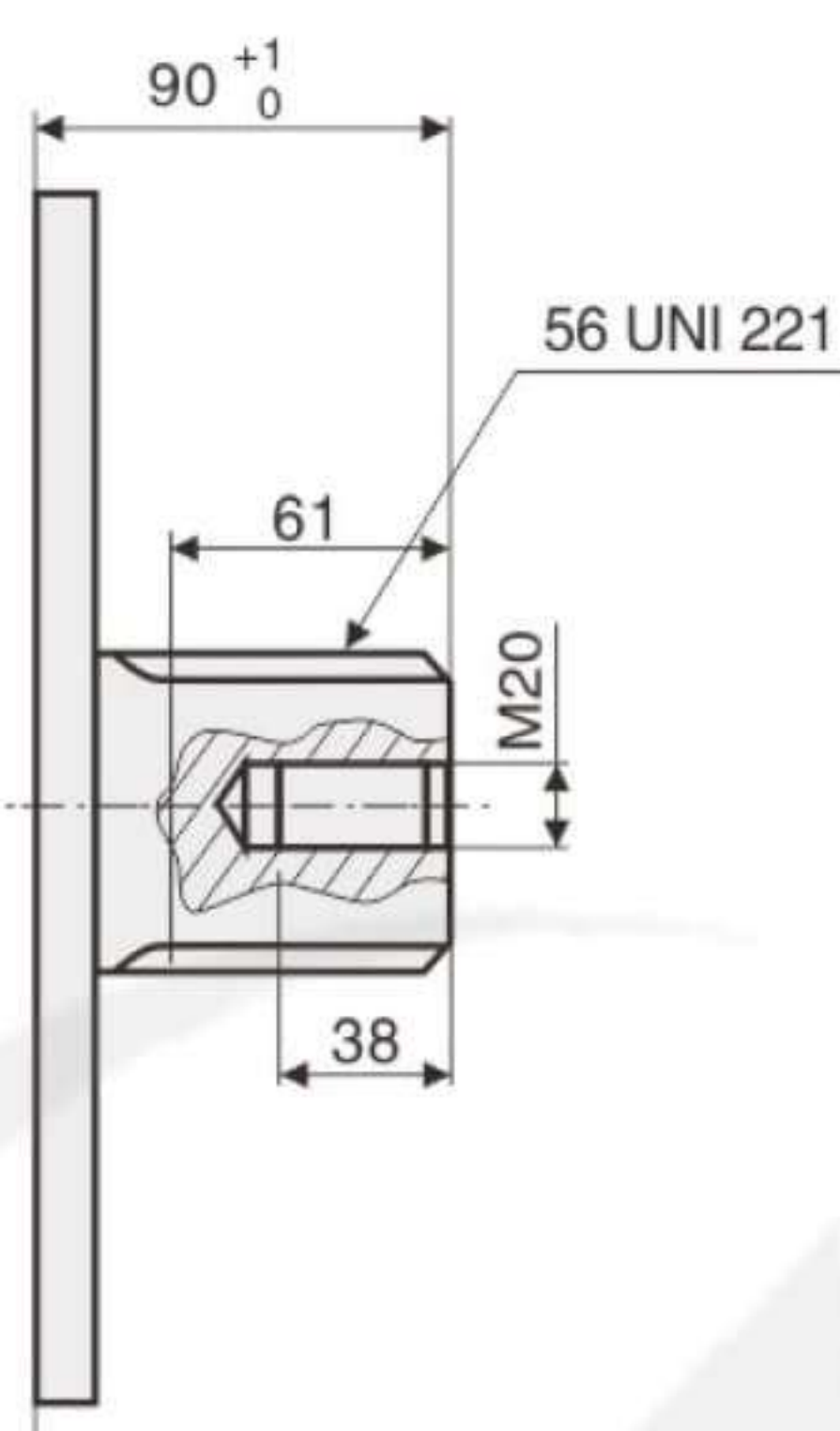


EGM5 外形及安装尺寸/ EGM5 Installation Dimensions

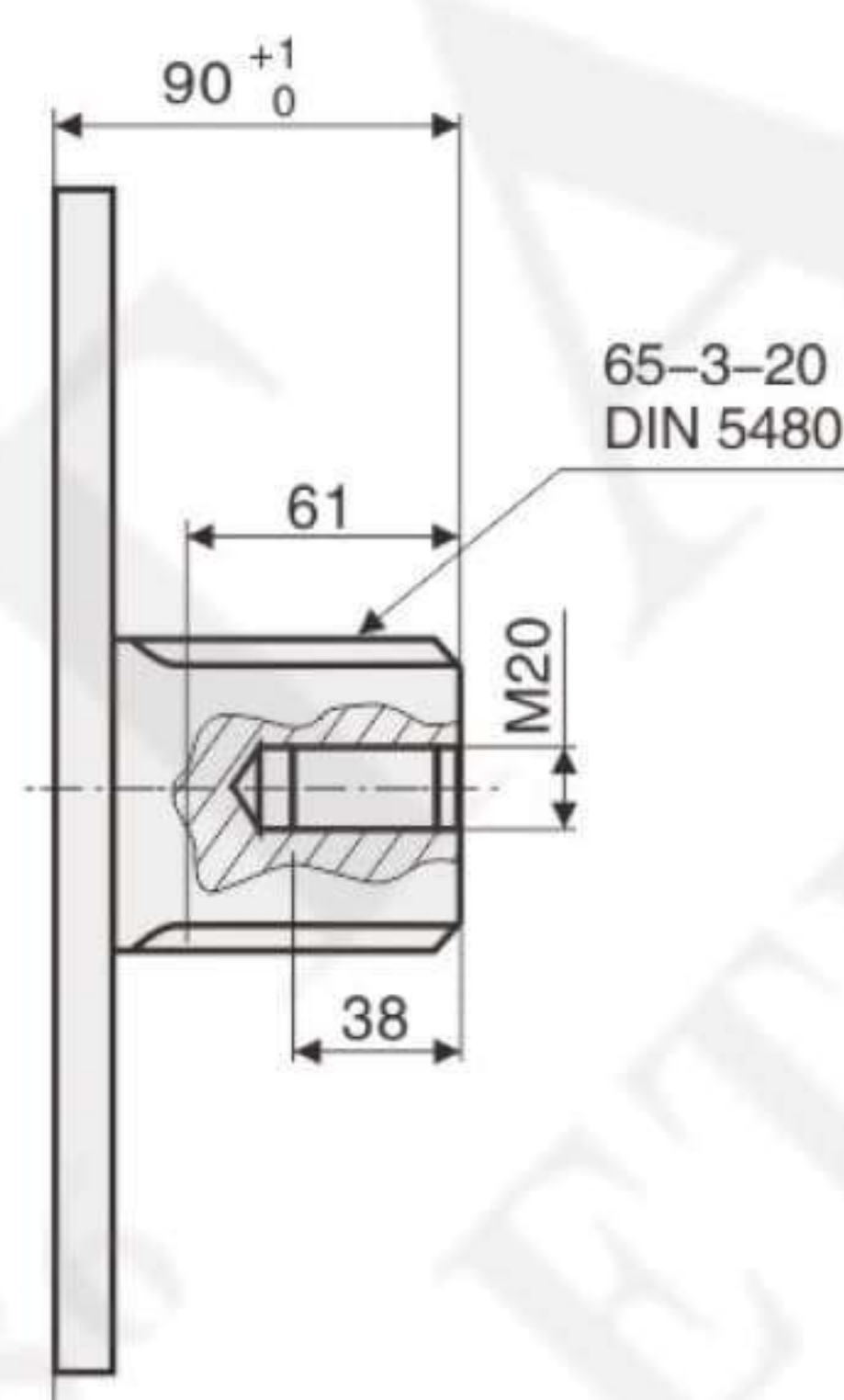


EGM5液压马达可完全替代GM5, INM5, XHS5
EGM5 can completely replace GM5, INM5, and XHS5.

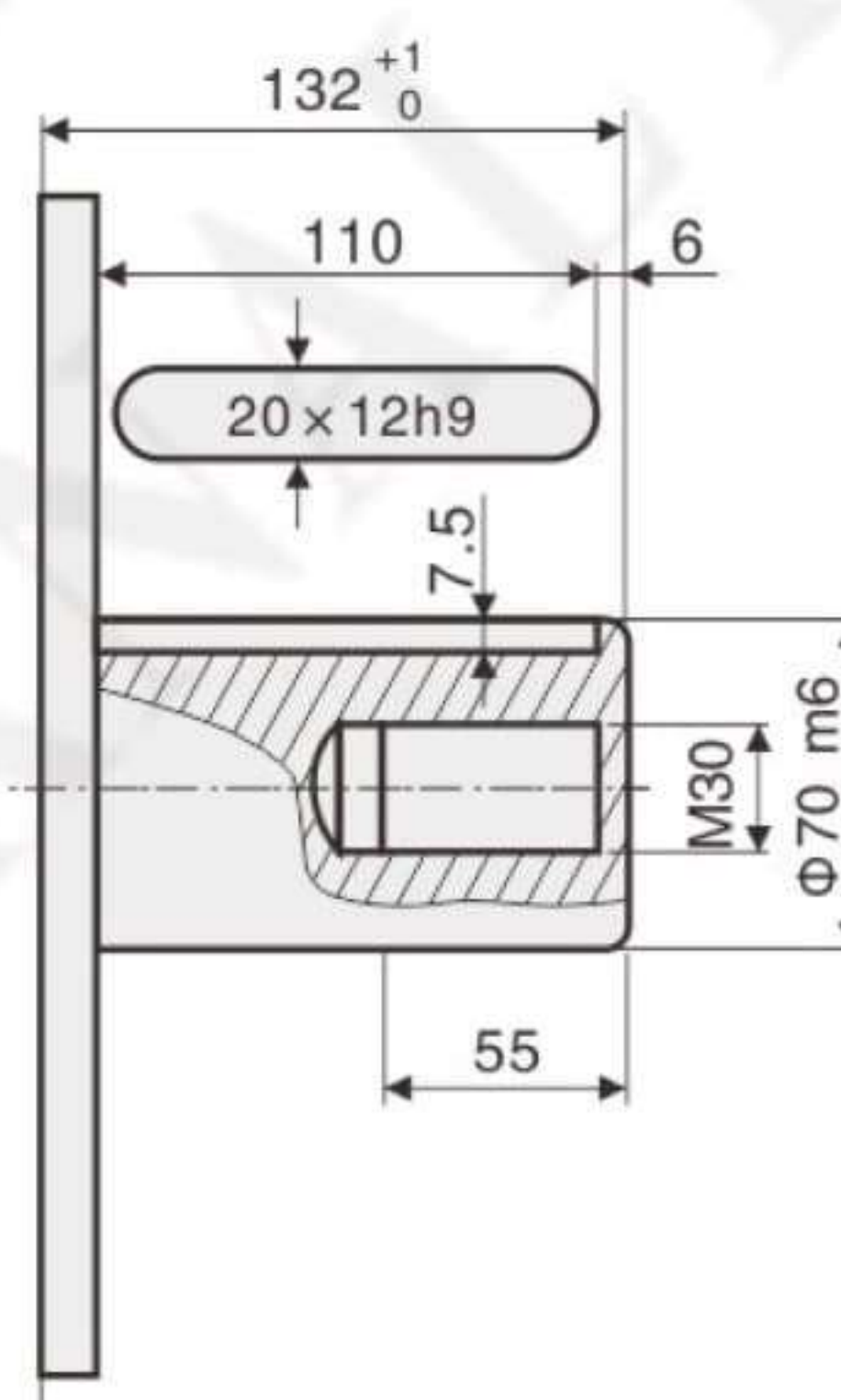
矩形外花键
Rectangular male Spline



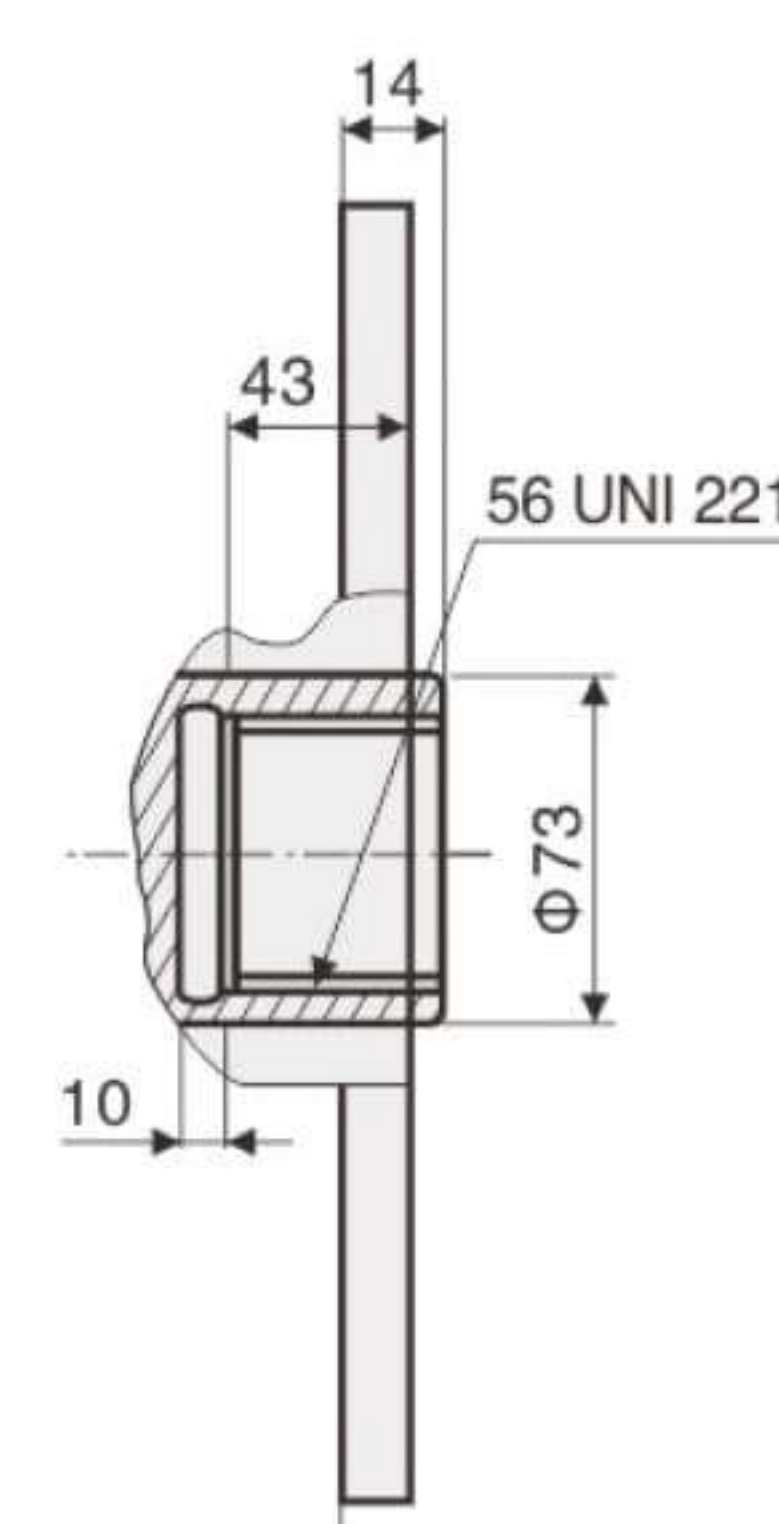
渐开线外花键 A
Involute outer Spline A



圆柱平键 B
Cylinder Flat Key B



内花键 I
Female spline I



花键参数/ Spline parameters

DIN	65-3-20 DIN5480	55-3-26 DIN5428	55-3-17 DIN5428	56 UNI 221(10-56-65 DIN 5428)
d0	Φ 60.0	Φ 52.0	Φ 51.0	d1 Φ 56.0 $^{+0.030}_{+0}$ H7
d1	Φ 65.0 $^{+0.740}_{+0}$ H14	Φ 55.0 $^{+0.300}_{+0}$ H12	Φ 55.0 $^{+0.740}_{+0}$ H14	d2 Φ 65.0 $^{+0.190}_{+0}$ H11
d2	Φ 59.0 $^{+0.190}_{+0}$ H11	Φ 50.0 $^{+0.160}_{+0}$ H11	Φ 49.0 $^{+0.160}_{+0}$ H11	A 10.0 $^{+0.028}_{-0.013}$ F7
A	Φ 5.25	Φ 3.5	Φ 5.25	d3 Φ 56 $^{-0.010}_{-0.029}$ g6
da	Φ 54.101 H11	Φ 46.902 H10	Φ 43.807 H11	d4 Φ 65.0 $^{-0.100}_{-0.190}$ H11
d3	Φ 64.4 $^{-0.190}_{-0.190}$ h11	Φ 54.5 $^{-0.190}_{-0.190}$ h11	Φ 54.4 $^{-0.190}_{-0.190}$ h11	B 10 $^{-0.013}_{-0.028}$ f7
d4	Φ 58.4 $^{-0.740}_{-0.740}$ h14	Φ 49.0 $^{-0.300}_{-0.300}$ h12	Φ 48.4 $^{-0.620}_{-0.620}$ h14	
B	Φ 6.0	Φ 3.5	Φ 6.0	
db	Φ 70.999 f8	Φ 56.953 e8	Φ 60.873 f8	

联轴器 Couplings

