

**CASCO**

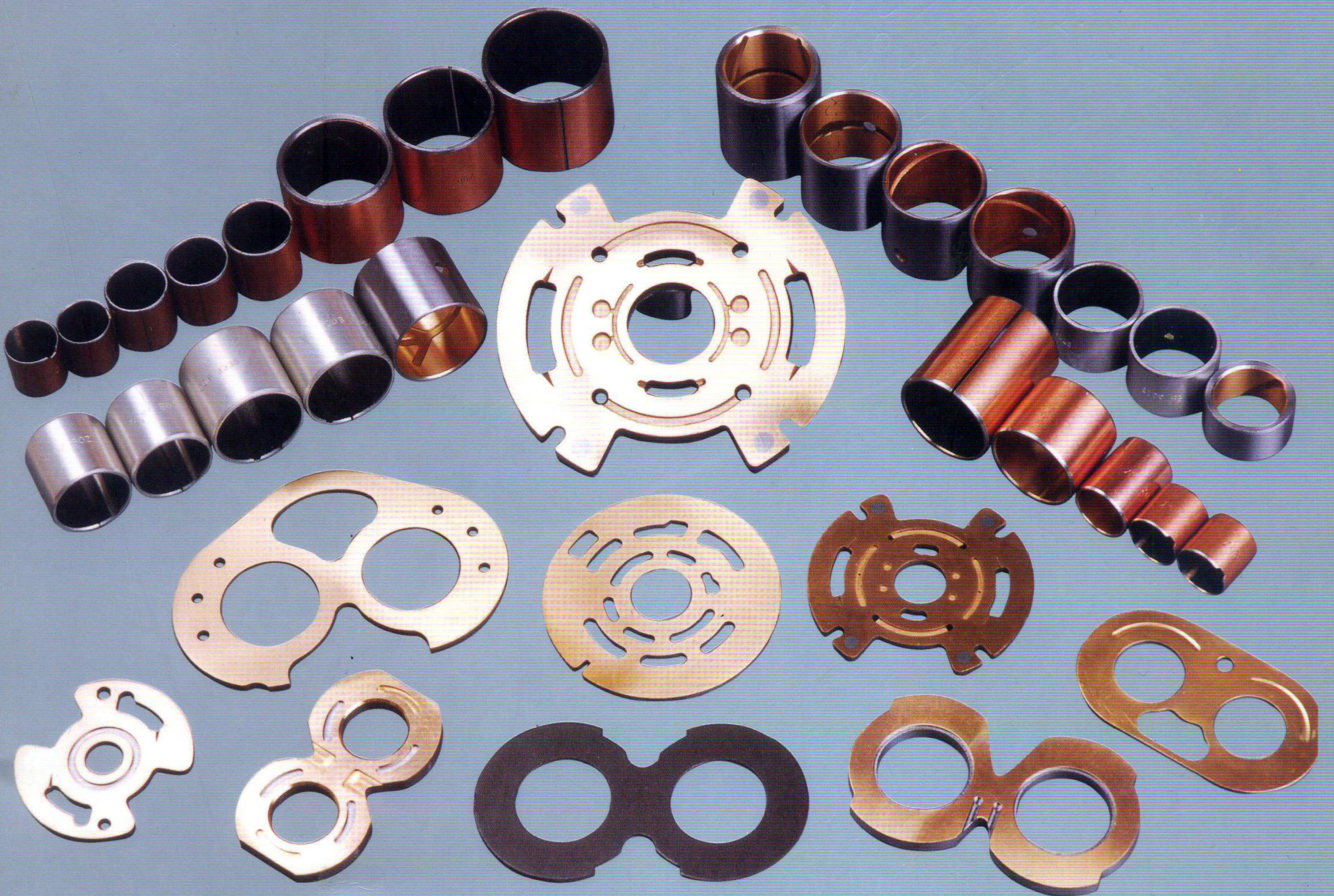
ISO/TS16949:2002



ISO14001

Sliding bearing applied for hydraulic pump industry

DESIGNER'S BOOK ( No. 3)



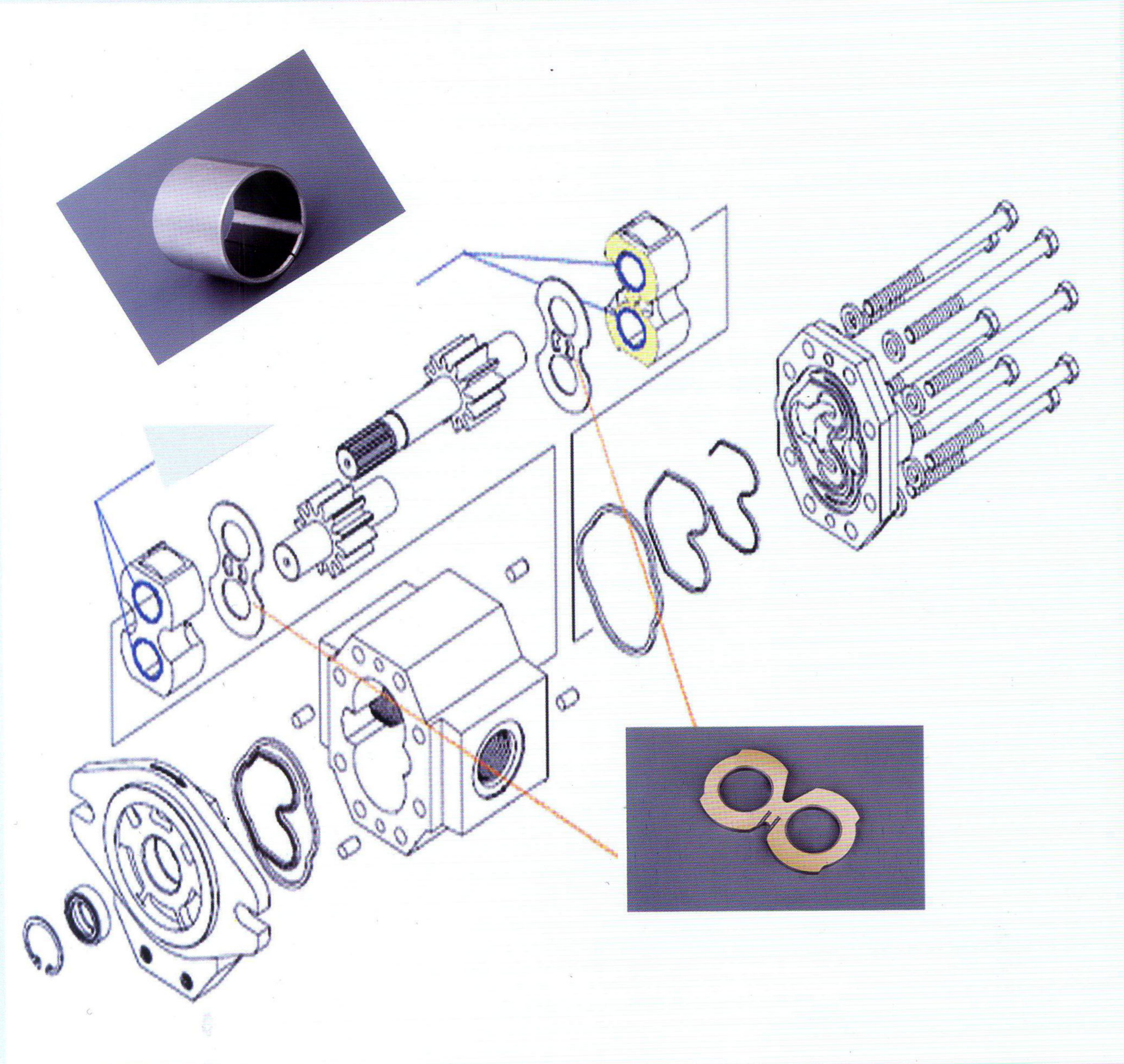
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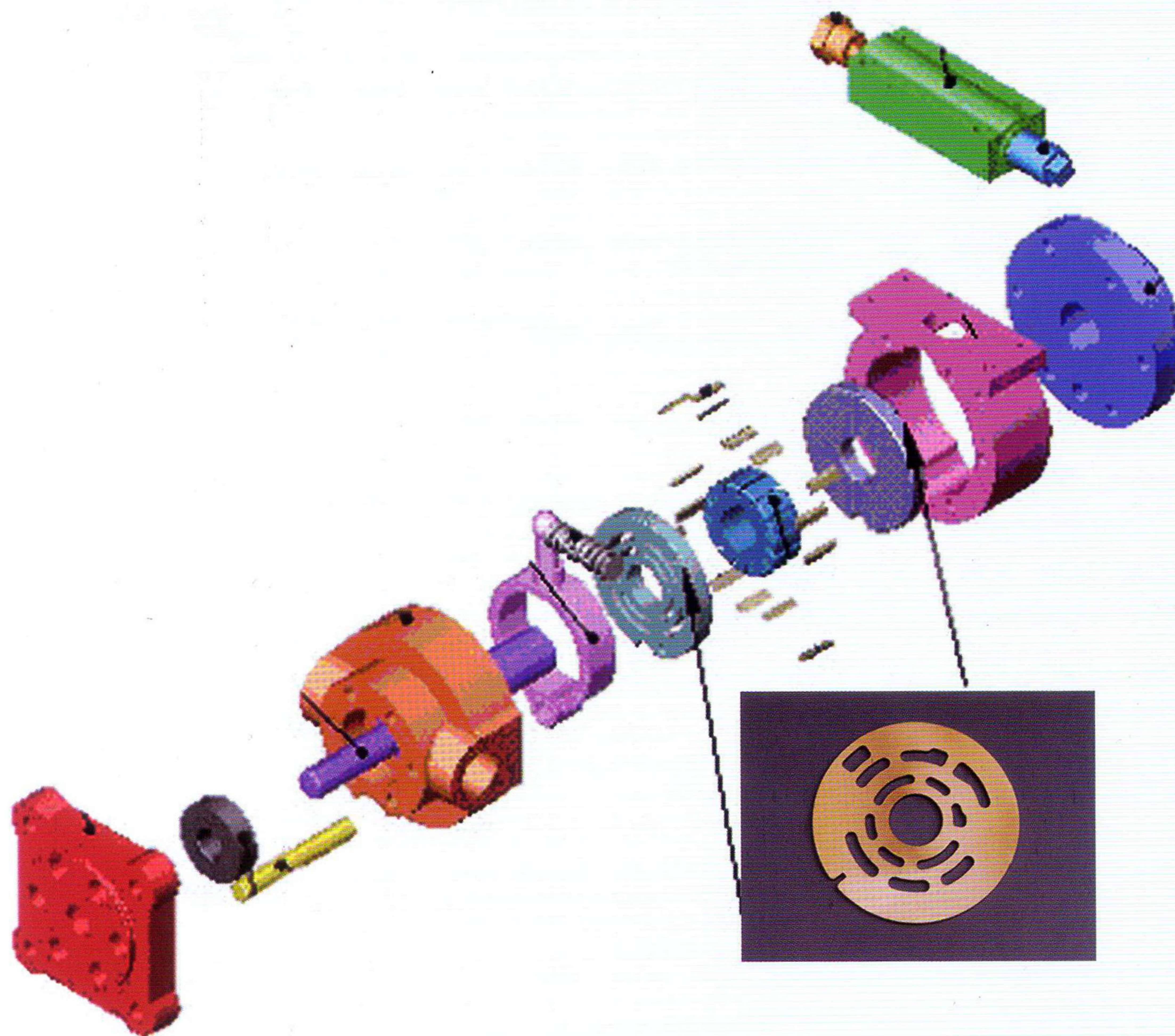
# 齿轮泵解剖示意图

Gear pump dissection diagram



# 叶片泵解剖示意图

Vane pump dissection diagram



# 液压泵推荐产品： SF-1T SF-1X JF-800 JF-720

Hydraulic pump recommended product:

推荐产品主要物理性能对照表

The main physical performance comparison table

轴承型号 Type	最大承载 Load capacity		油润滑最大PV值 Pv limit oil	最高滑动速度 (油润滑) Speed limit (In oil)	使用温度 Temp. limit°C
	静承载 Static	动承载 Dynamic			
SF-1T	250N/MM <sup>2</sup>	140N/MM <sup>2</sup>	60N/MM <sup>2</sup> *M/S	10M/S	(-195°C~260°C)
SF-1X	250N/MM <sup>2</sup>	140N/MM <sup>2</sup>	50N/MM <sup>2</sup> *M/S	5M/S	(-195°C~270°C)
JF-800	250N/MM <sup>2</sup>	65N/MM <sup>2</sup>	10N/MM <sup>2</sup> *M/S	5M/S	(-195°C~260°C)
JF-720	250N/MM <sup>2</sup>	38N/MM <sup>2</sup>	10N/MM <sup>2</sup> *M/S	10M/S	(-195°C~170°C)

推荐产品主要机械性能对照表

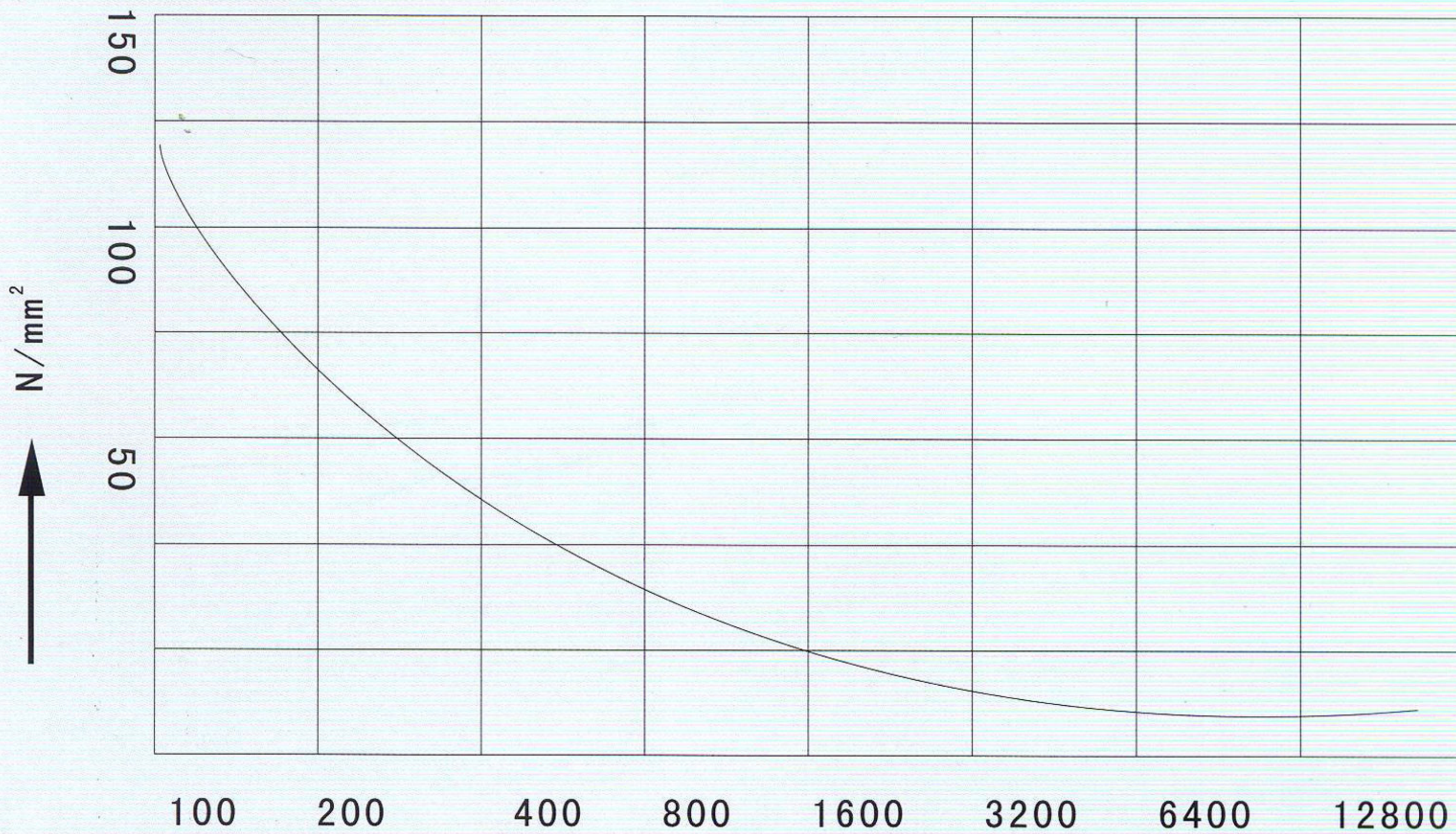
The main mechanical performance comparison table

轴承型号 Type	摩擦系数 Frictioncoef	导热系数 Thrmal conductivity	线胀系数 Liner expansion	合金层硬度 Alloy layer expansion	合金层材质 Alloy layer material
SF-1T	0.03~0.18	13W/MK	$11 \times 10^{-6} * K^{-1}$	/	Reformatted PTFE
SF-1X	0.04~0.20	13W/MK	$11 \times 10^{-6} * K^{-1}$	/	PTFE
JF-800	0.06~0.14	/	/	HB70-100	CuPb10Sn10
JF-720	0.06~0.16	/	/	HB45-70	CuPb24Sn4

# SF-1轴承系列主要性能表

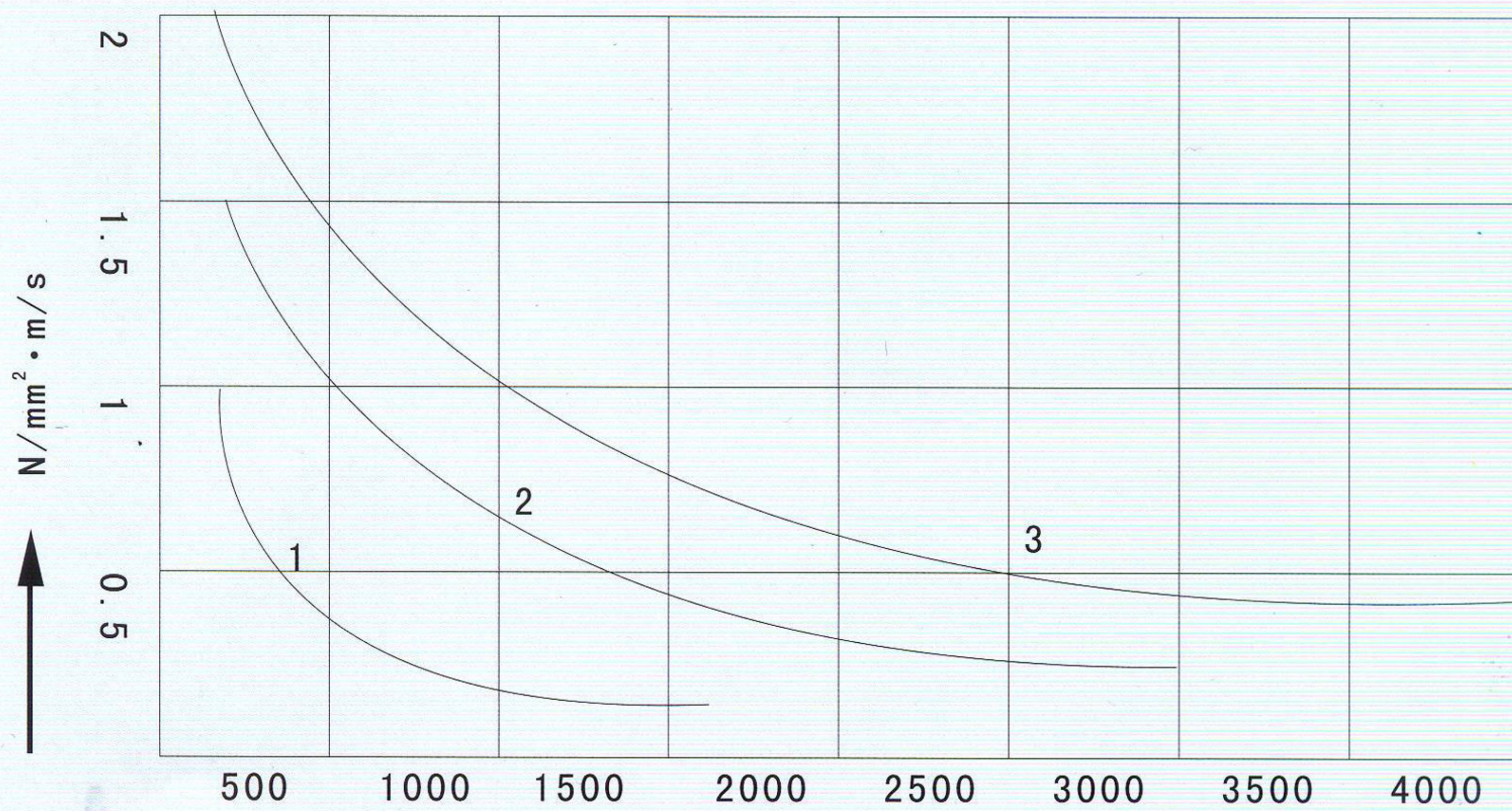
Diagram of main properties of SF-1 bush series

载荷极限  
Load limit



要求寿命以下荷极限  
Load limit under required life(cycies)

PV值极限  
PV limit



SF-1系列寿命  
Life OF SF-1 bushing series  
各种在形式与不同要求寿命下的PV极限值  
PV limit under various load and life conditions

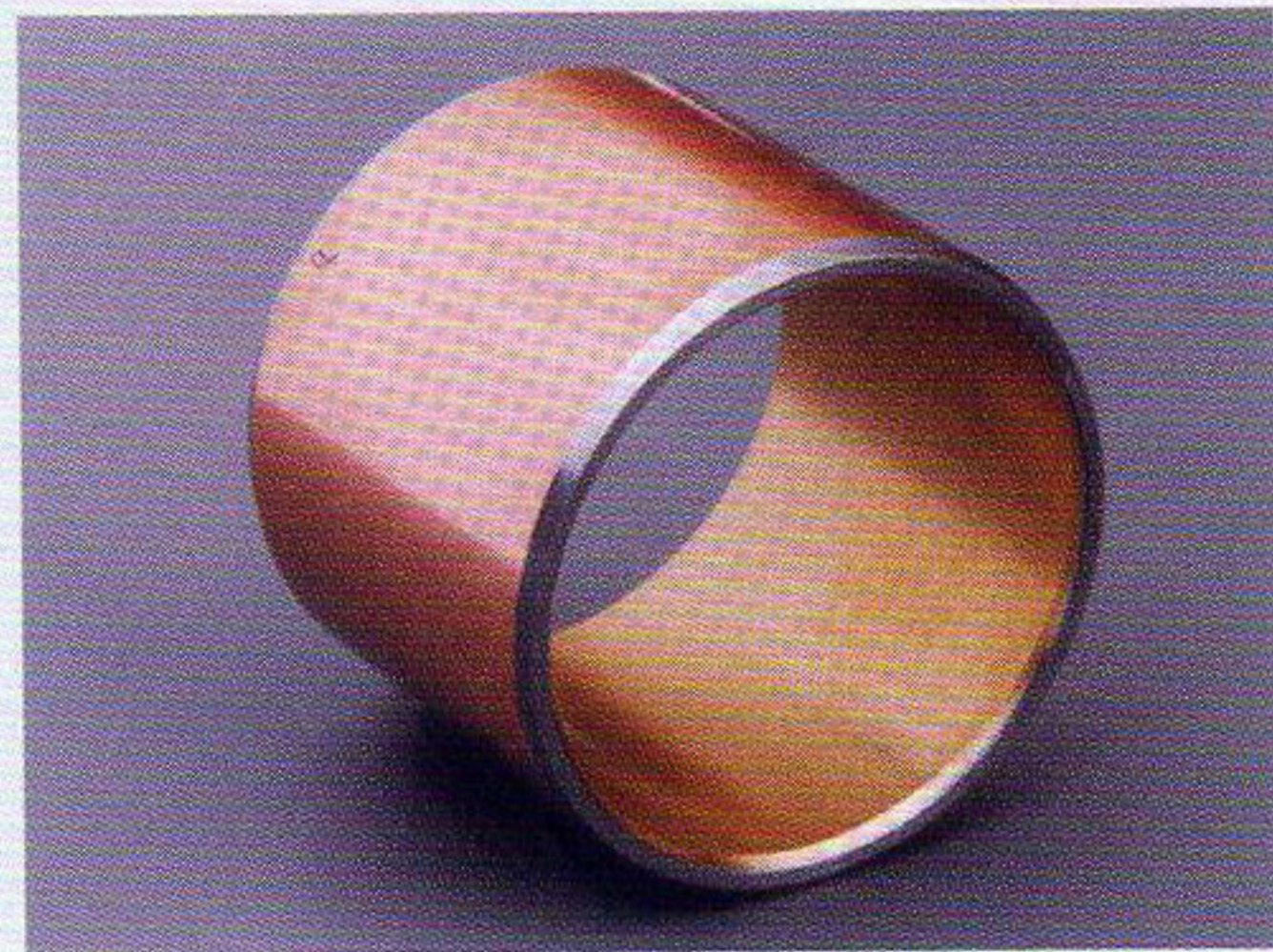
注: 1. 止推作用 Thrust  
2. 轴旋转 Shaft Rotating  
3. 轴承旋转 Bush Rotating

# 轴承金相组织

Bearing metallurgical structure



(JF-800)



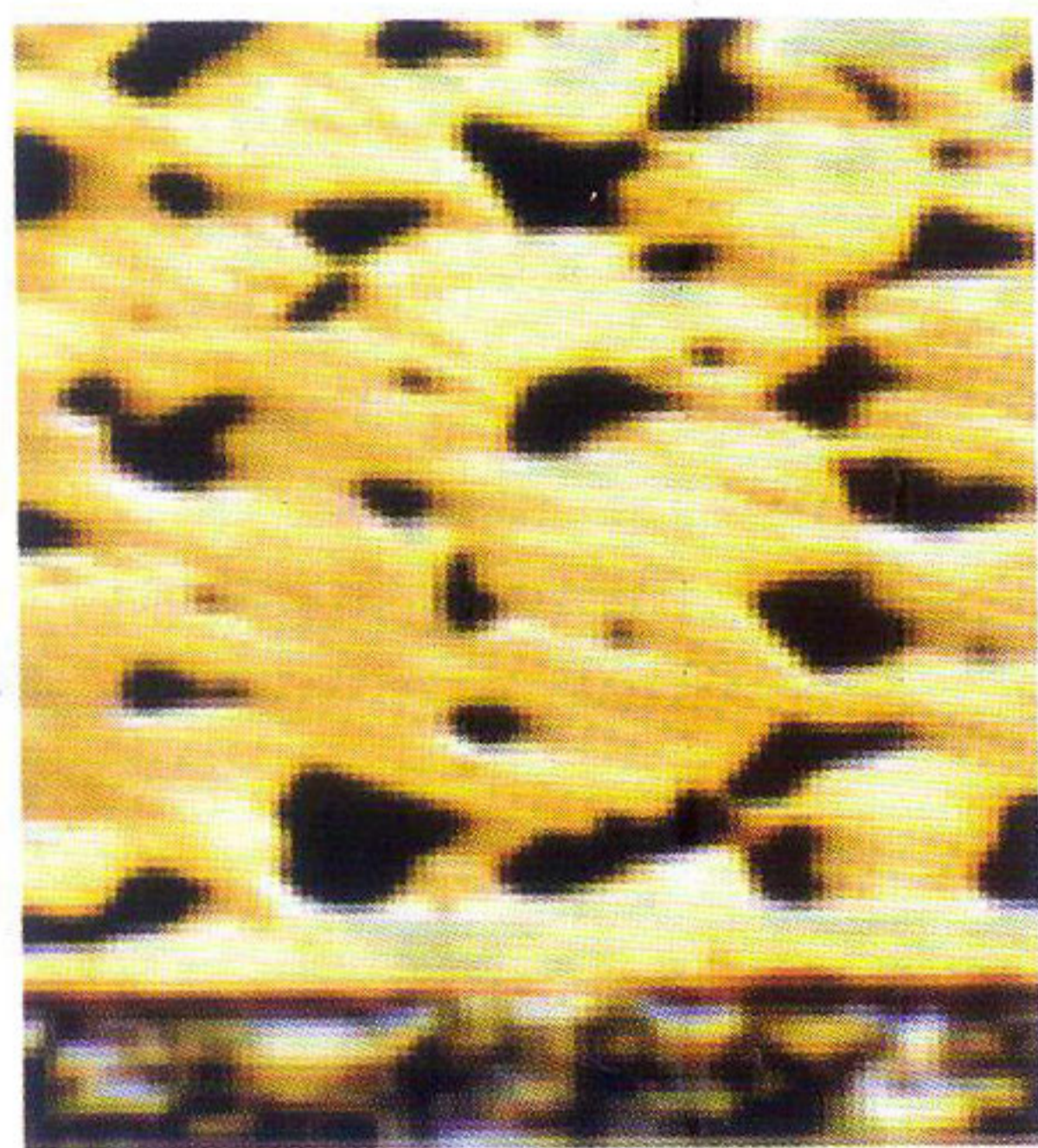
(JF-720)



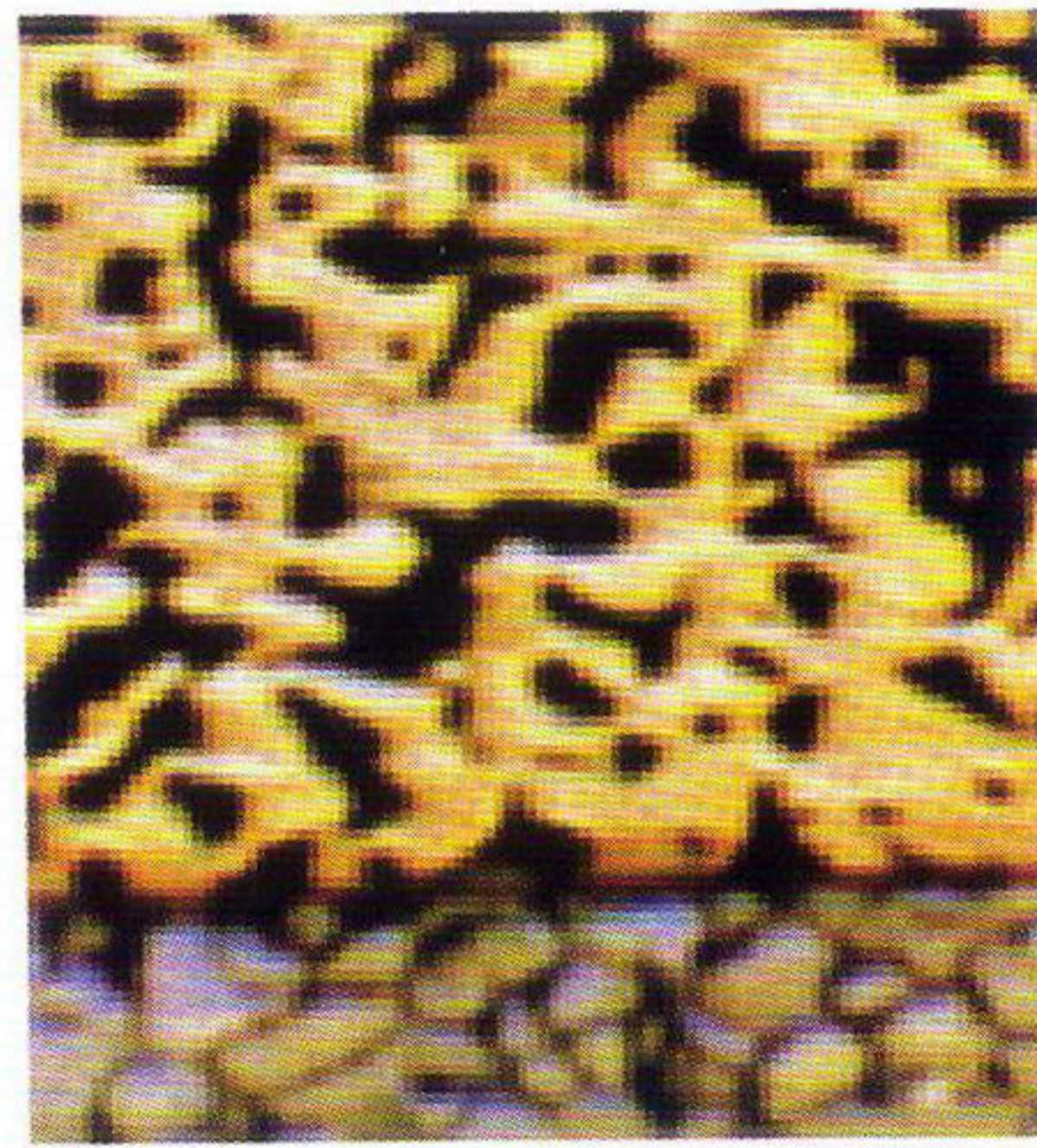
(SF-1X)



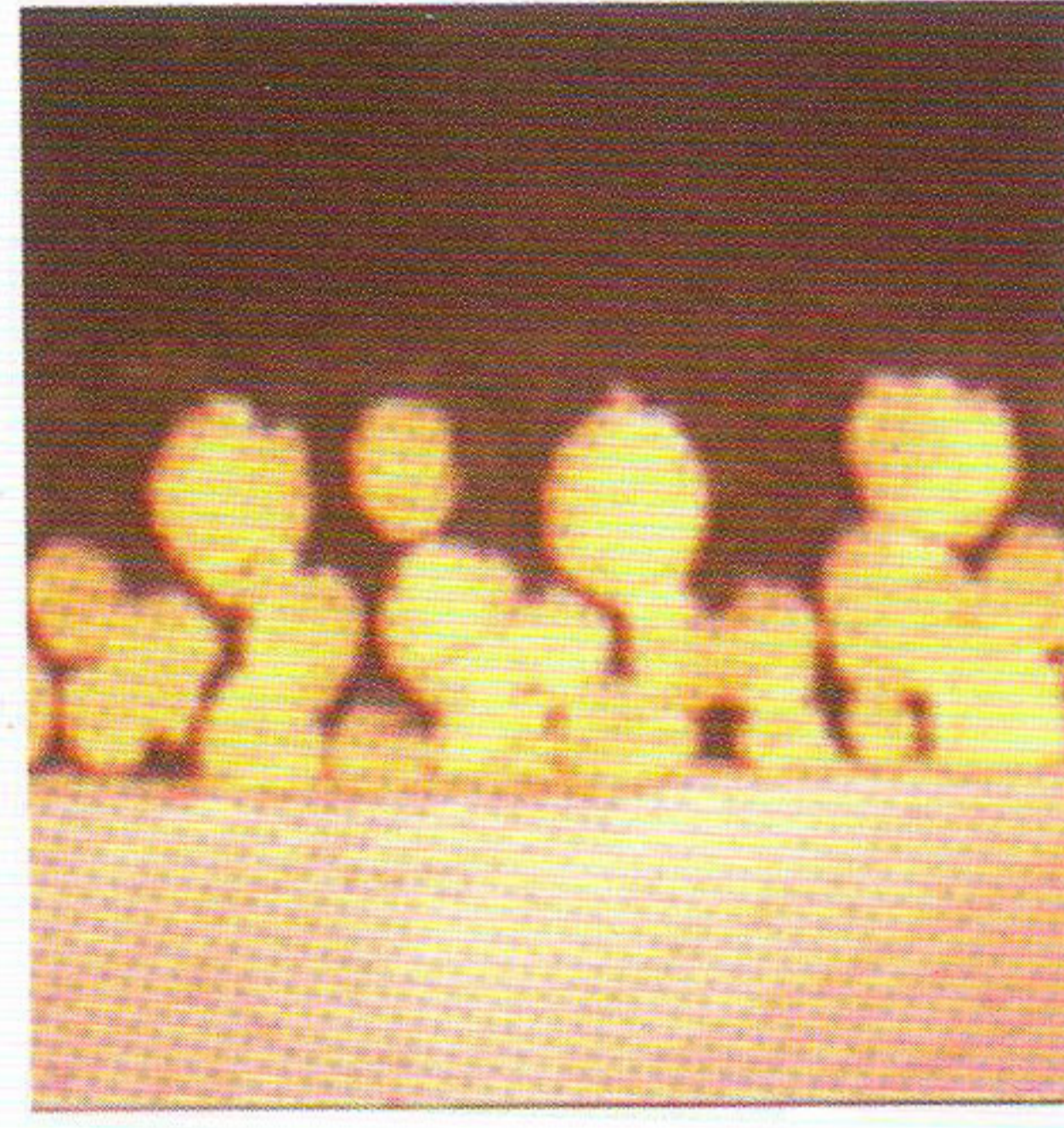
(SF-1T)



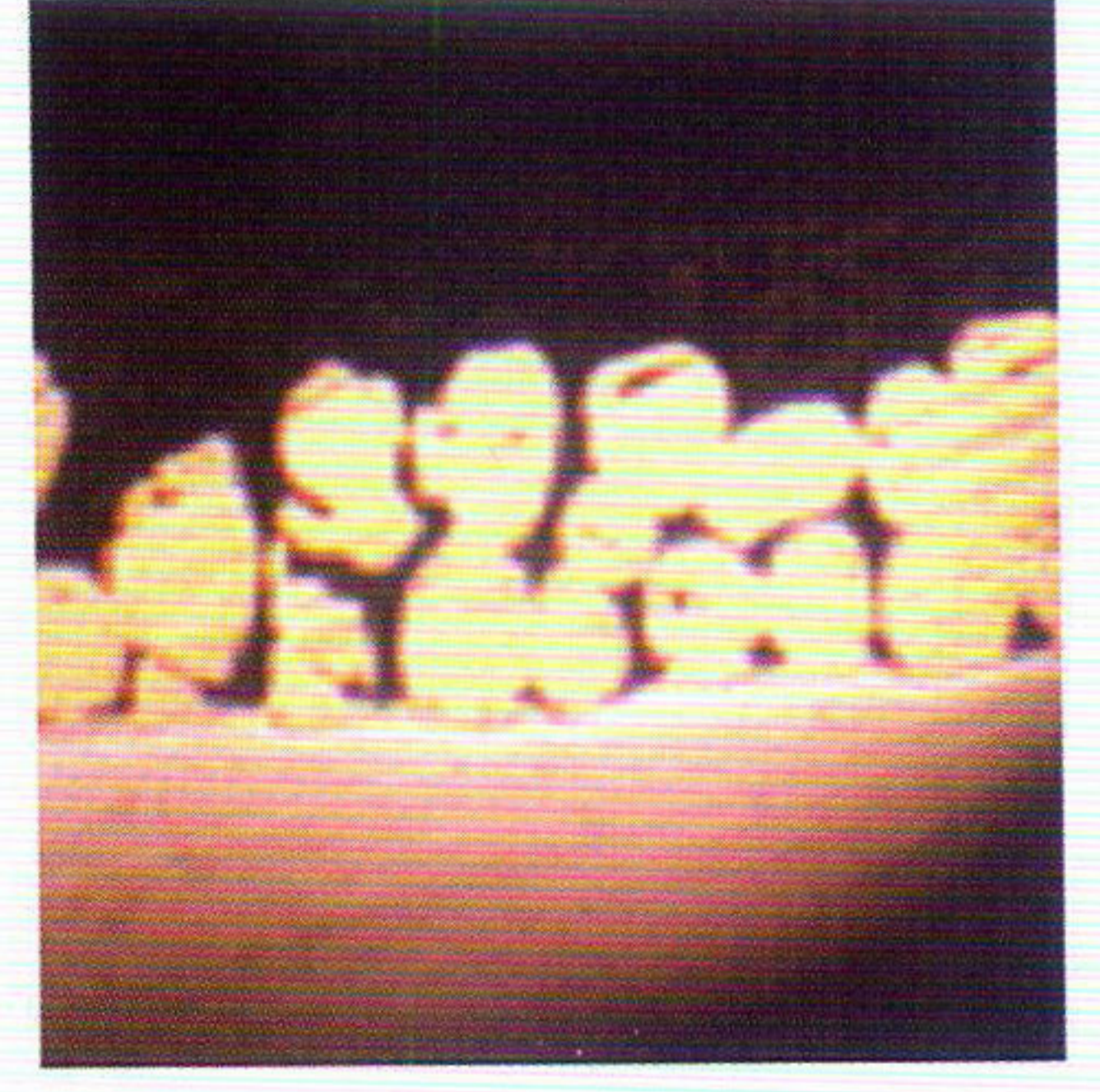
适用侧板选材, 耐压, 耐磨, 硬度HB>90  
Suitable for material applied for side plates. Pressure proof, wear resistant, alloy hardness HB>90



适用轴套减磨性能  
Suitable for pump bushing wear resistant performance



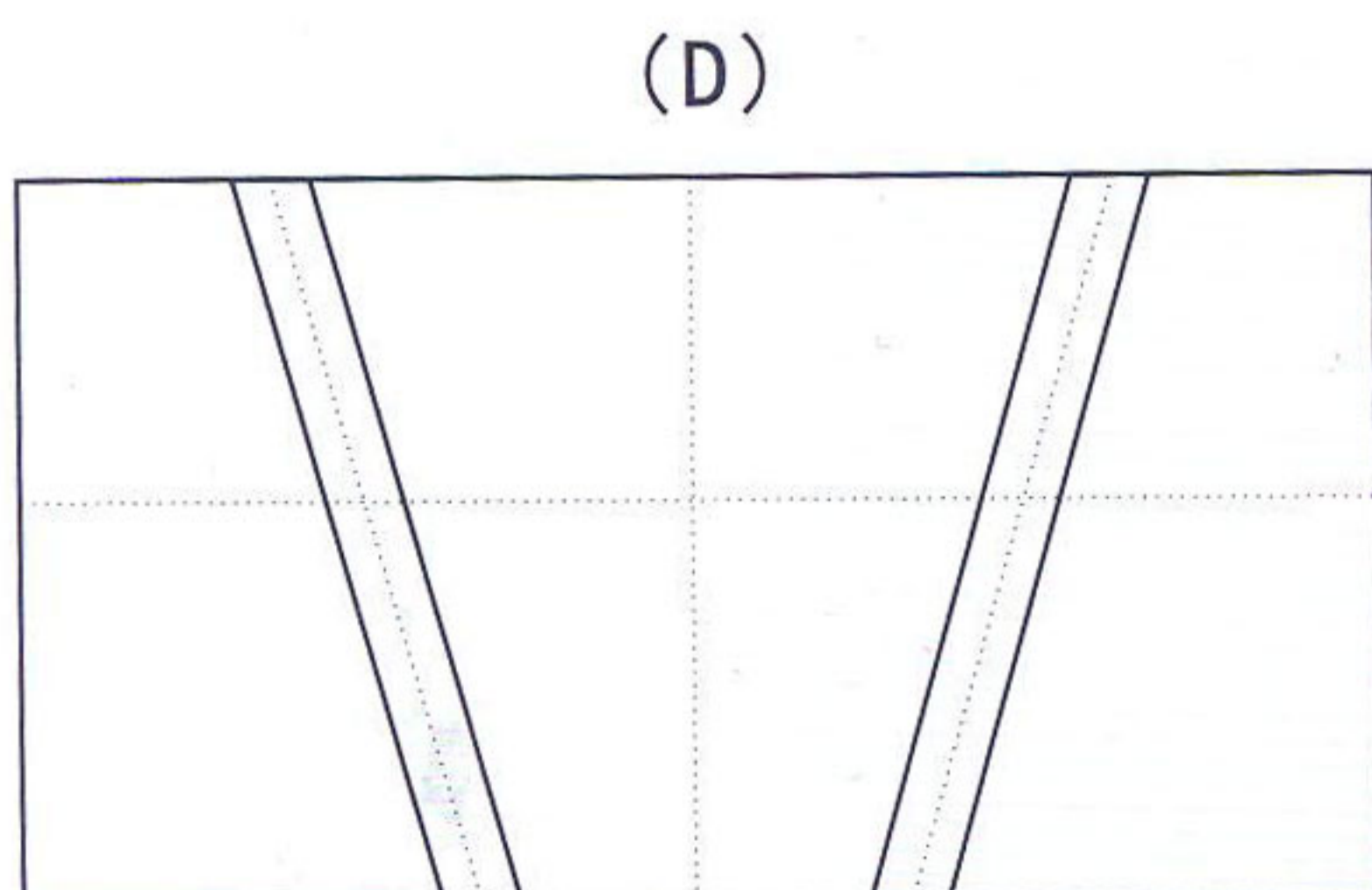
适用小型油泵  
Suitable for smaller sized hydraulic pump



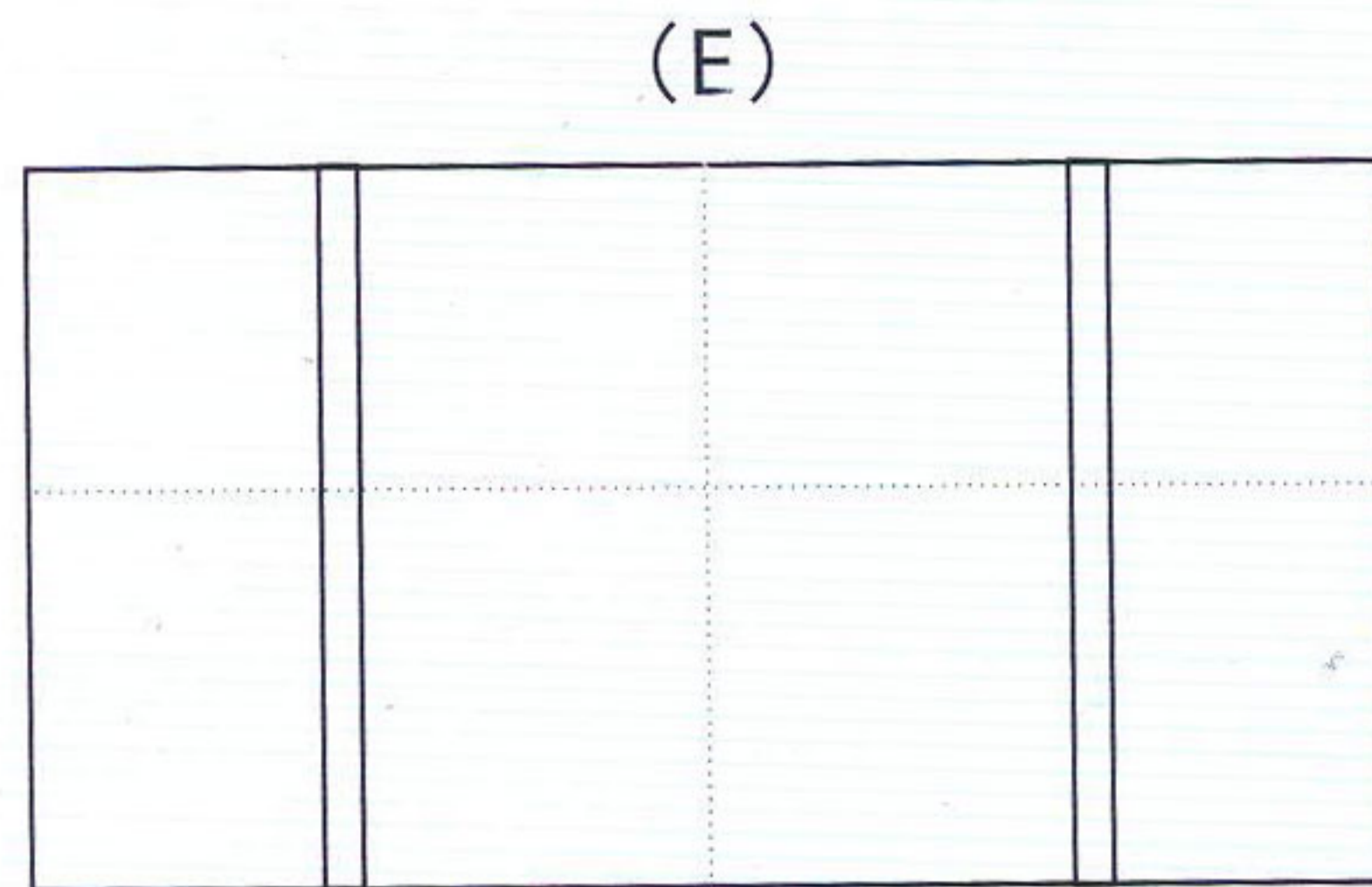
适用高压油泵  
Suitable for high pressure hydraulic pump

# 可选择产品油槽形式

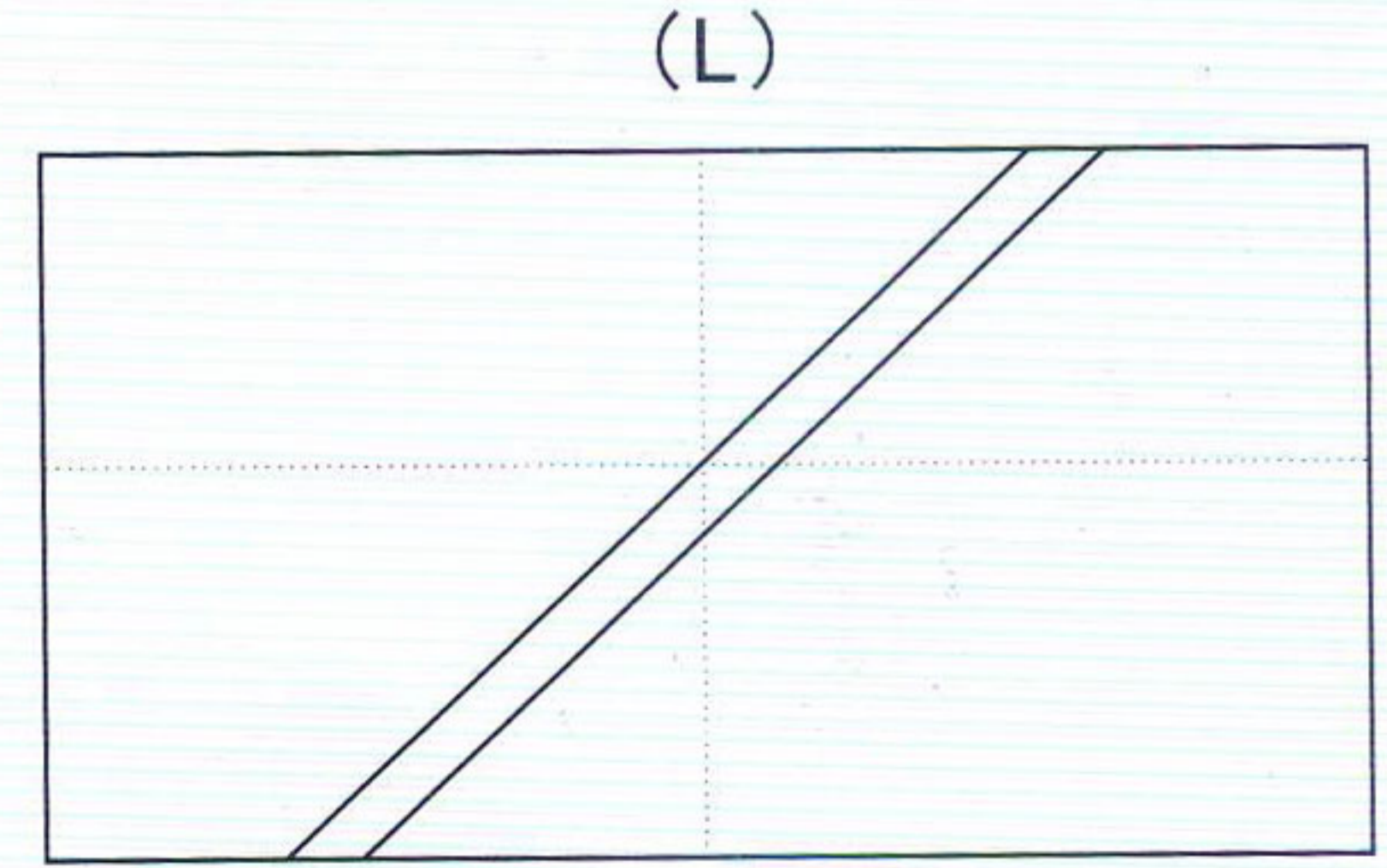
Oil grooves optional for bushings



双金属轴承油槽  
Oil groove for bi-metal bushing in hydraulic pumps



SF-1T油泵用轴承油槽  
Oil groove for SF-1T bushing in hydraulic pumps



SF-1X油泵用轴承油槽  
Oil groove for SF-1X bushing in hydraulic pumps

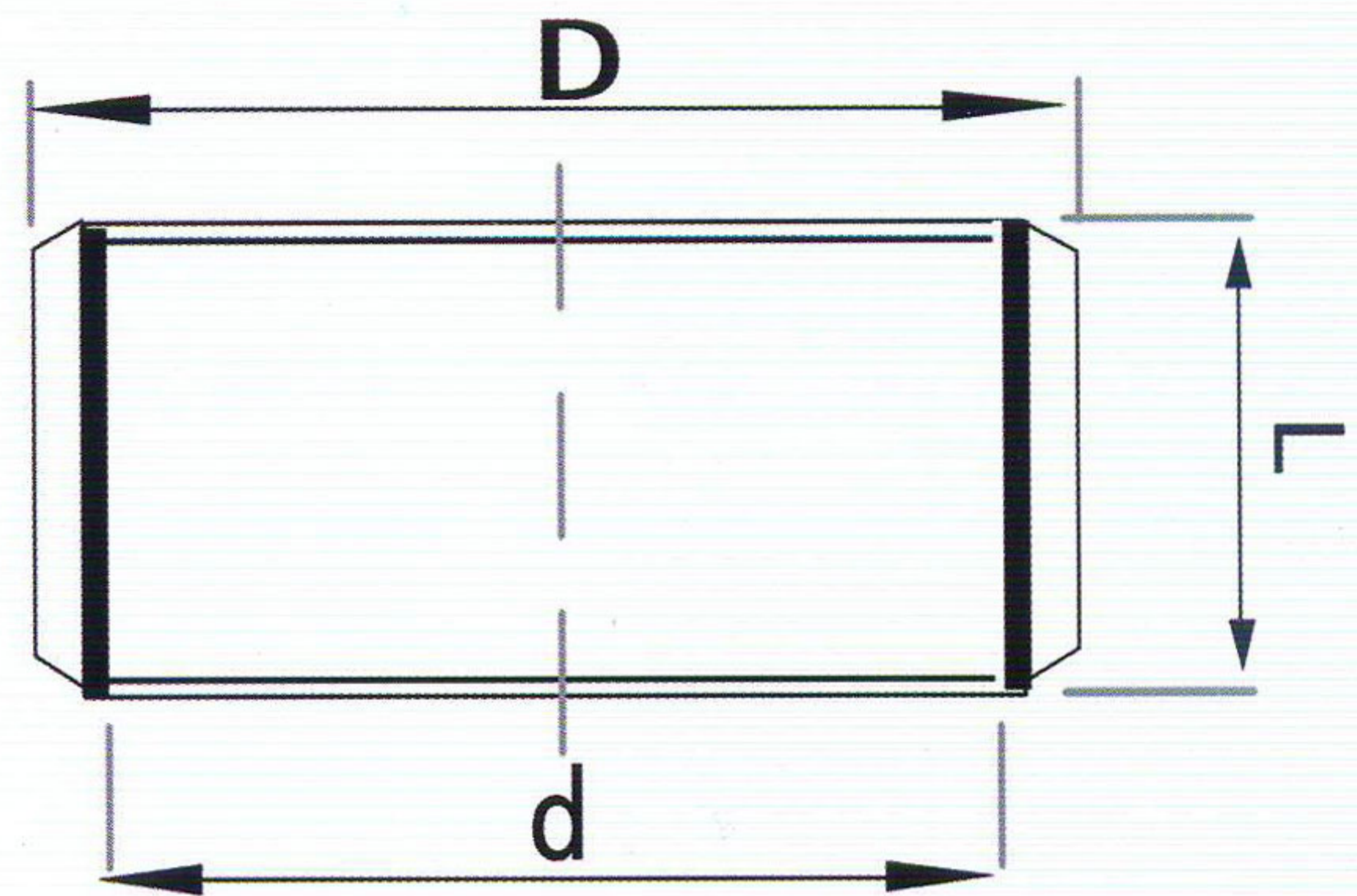
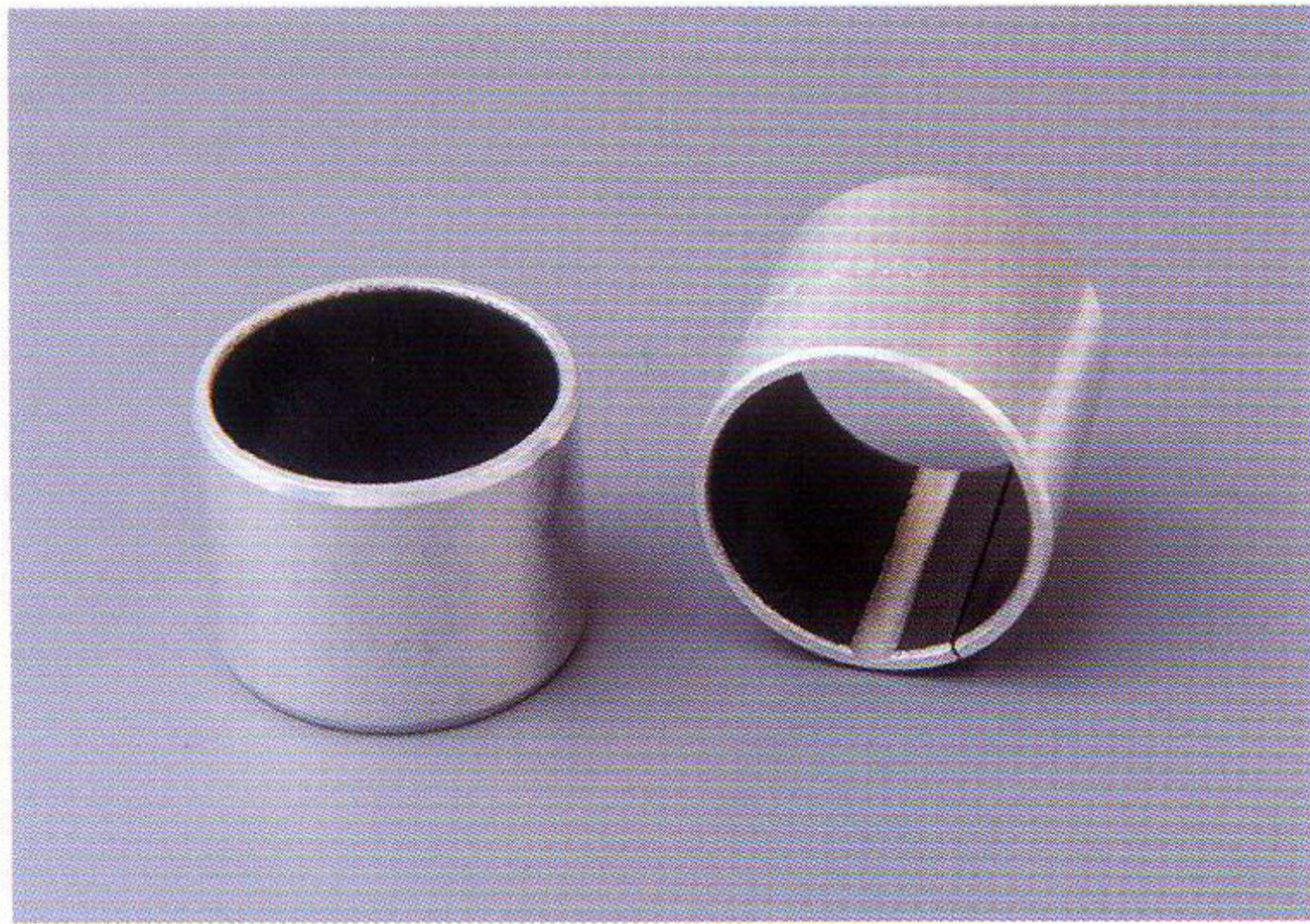
# SF、JF系列滑动轴承化学成份

## Composition analysis of JF,SF bushings

材料 Material	化学元素 Chemical elements	JF-800	JF-720	SF-1T	SF-1X
钢板层 Steel backing	C	≤0.10	≤0.10	≤0.10	≤0.10
	S	≤0.035	≤0.035	≤0.035	≤0.035
	Mn	≤0.50	≤0.50	≤0.50	≤0.50
	P	≤0.035	≤0.035	≤0.035	≤0.035
润滑层 Lubrication layer	Cu	余量Remainder	余量Remainder	余量Remainder	余量Remainder
	Sn	9.0~11.0	21.0~27.0	7.0~9.0	7.0~9.0
	Pb	9.0~11.0	3~4.5	/	/
	Zn	≤0.5	≤0.5	/	/
	Pb	≤0.1	≤0.1	/	/
	P	≤0.7	≤0.7	2.0~4.0	2.0~4.0
	Fe	≤0.5	≤0.5	/	/
	Ni	≤0.2	≤0.2	/	/
	PTFE	-	-	Reformatted	PTFE + FIBER
	其他Other	≤0.5	≤0.5		



## SF-1X/SF-1T bushing specs recommended



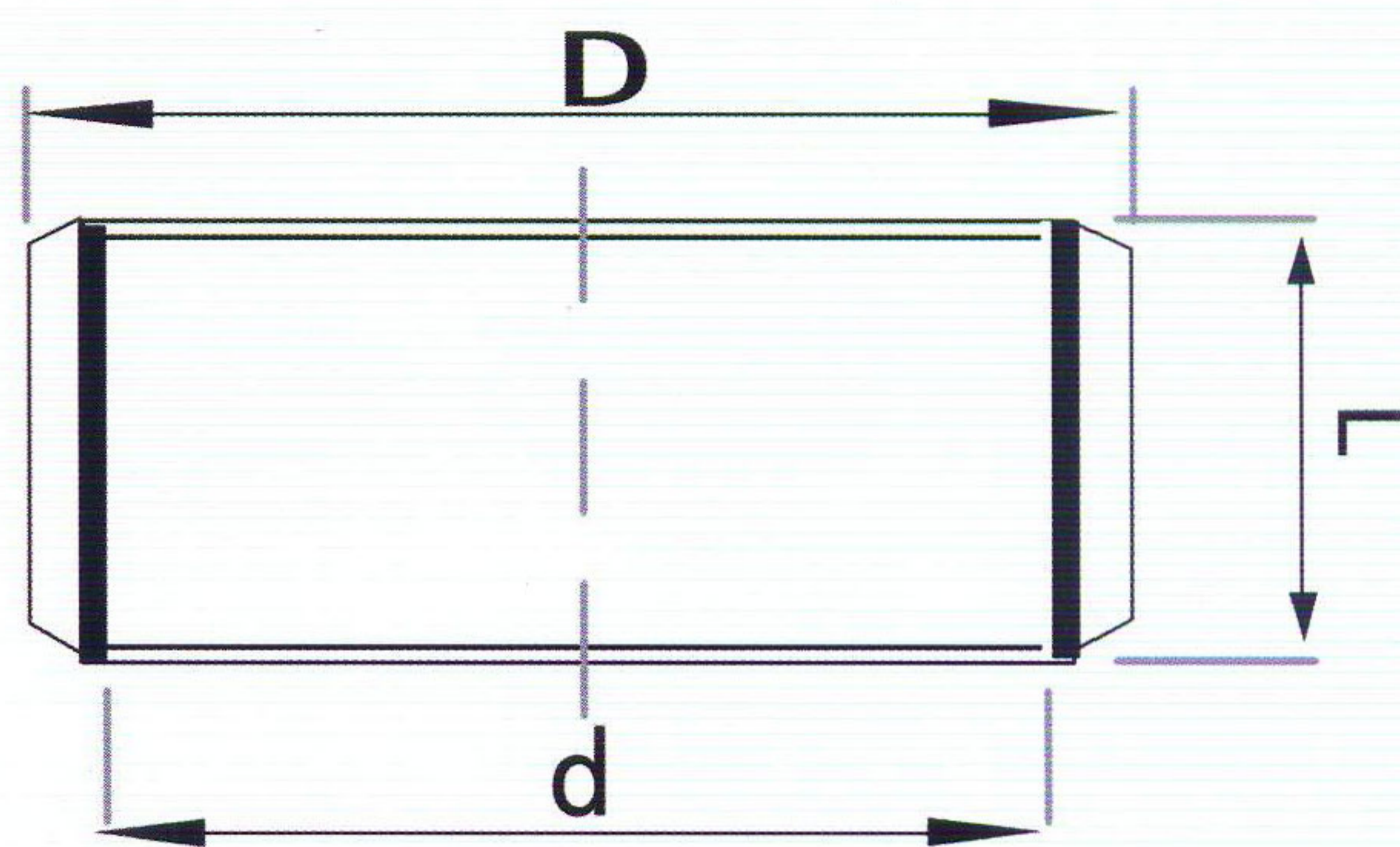
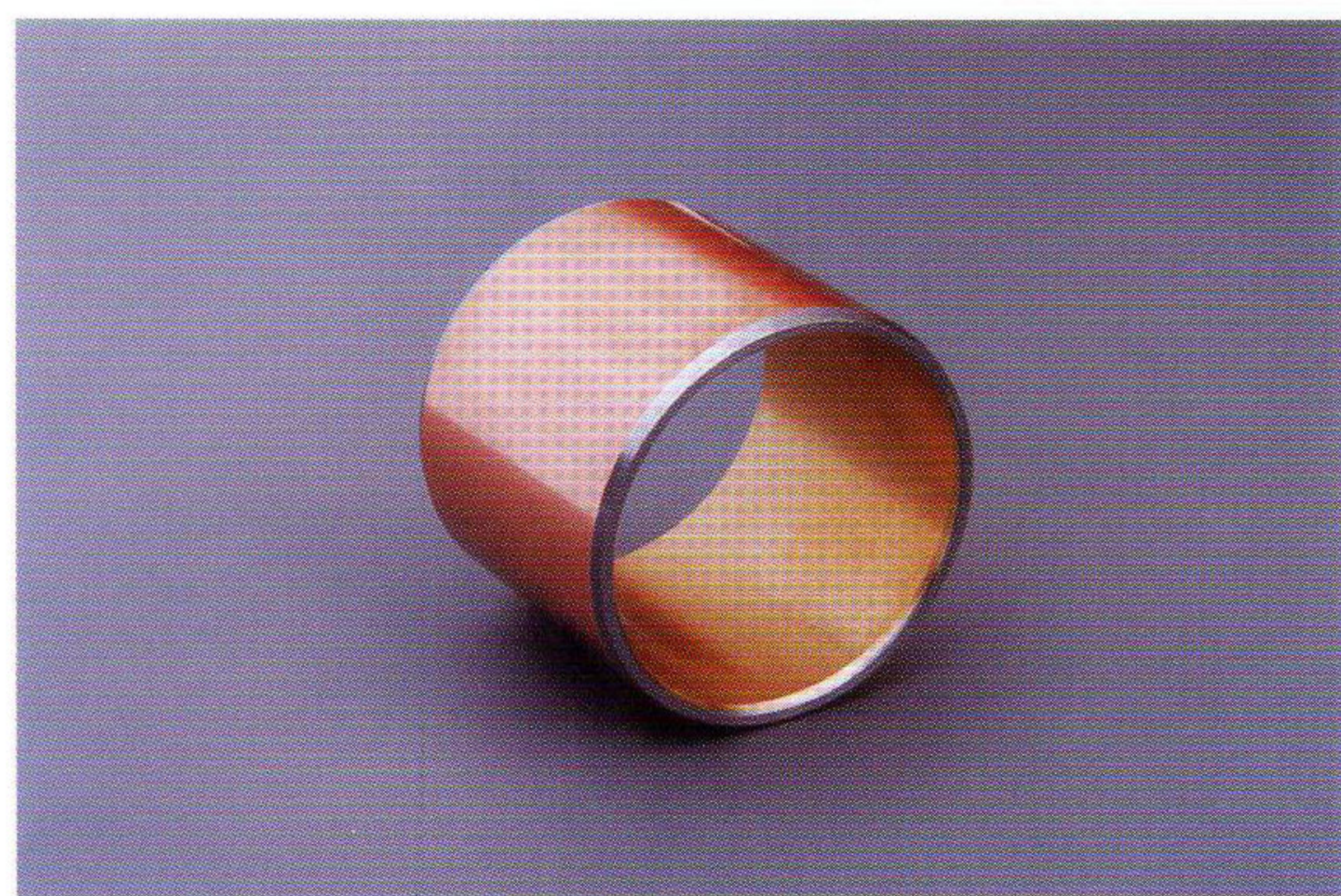
型号 Type	d	D	L	相配轴径 Shaft Dia	相配座孔 Housing Bore H7	价格 Unit Price RMB/EA
SF-1T	8	12	10	8 $\begin{matrix} -0.013 \\ -0.028 \end{matrix}$	12 $\begin{matrix} +0.018 \\ 0 \end{matrix}$	0.80
SF-1T	8.9	11	11	8.9 $\begin{matrix} -0.013 \\ -0.028 \end{matrix}$	11 $\begin{matrix} +0.018 \\ 0 \end{matrix}$	0.80
SF-1T	8.91	11	10	8.91 $\begin{matrix} -0.013 \\ -0.028 \end{matrix}$	11 $\begin{matrix} +0.018 \\ 0 \end{matrix}$	0.80
SF-1T	9	11	8	9 $\begin{matrix} -0.013 \\ -0.028 \end{matrix}$	11 $\begin{matrix} +0.018 \\ 0 \end{matrix}$	0.90
SF-1X	9	11	15	9 $\begin{matrix} -0.013 \\ -0.028 \end{matrix}$	11 $\begin{matrix} +0.018 \\ 0 \end{matrix}$	1.00
SF-1T	9	12	10	9 $\begin{matrix} -0.013 \\ -0.028 \end{matrix}$	12 $\begin{matrix} +0.018 \\ 0 \end{matrix}$	0.90
SF-1T	9	13	10	9 $\begin{matrix} -0.013 \\ -0.028 \end{matrix}$	13 $\begin{matrix} +0.018 \\ 0 \end{matrix}$	0.90
SF-1T	9.8	13	9	9.8 $\begin{matrix} -0.013 \\ -0.028 \end{matrix}$	13 $\begin{matrix} +0.018 \\ 0 \end{matrix}$	0.90
SF-1T	10	12	10	10 $\begin{matrix} -0.013 \\ -0.028 \end{matrix}$	12 $\begin{matrix} +0.018 \\ 0 \end{matrix}$	0.80
SF-1T	12	14	14.75	12 $\begin{matrix} -0.016 \\ -0.034 \end{matrix}$	14 $\begin{matrix} +0.018 \\ 0 \end{matrix}$	1.18

型号 Type	d	D	L	相配轴径 Shaft Dia	相配座孔 Housing Bore H7	价格 Unit Price RMB/EA
SF-1X	13	15	10.5	13 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	15 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	0.80
SF-1T	13	15	11	13 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	15 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	0.80
SF-1T	14	16	18	14 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	16 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	1.36
SF-1T	15	17	10	15 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	17 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	0.96
SF-1X	15	17	23	15 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	17 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	1.85
SF-1T	15	18	16.5	15 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	18 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	1.40
SF-1T	16	18	10	16 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	18 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	1.02
SF-1T	16	18	15	16 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	18 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	1.27
SF-1T	16	19	17	16 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	19 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	1.52
SF-1T	16	19	17.5	16 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	19 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	1.57
SF-1T	16	19	18	16 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	19 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	1.61
SF-1T	16	20	14	16 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	20 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	1.32
SF-1T	16.9	20.3	23.3	16.9 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	20.3 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	2.23
SF-1T	16.9	20.31	23	16.9 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	20.31 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	2.20
SF-1T	17	20	20	17 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	20 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	1.88
SF-1T	17	20	23.5	17 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	20 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	2.21
SF-1T	17	20.4	14.8	17 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	20.4 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	1.42
SF-1T	18	21.4	40	18 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	21.4 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	4.03
SF-1T	18	21.4	42	18 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	21.4 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	4.24
SF-1X	18	20	11.5	18 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	20 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	1.08
SF-1X	18	20	17.5	18 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	20 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	1.65
SF-1X	18	20	20	18 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	20 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	1.88

型号 Type	d	D	L	相配轴径 Shaft Dia	相配座孔 Housing Bore H7	价格 Unit Price RMB/EA
SF-1X	18	20	21	18 $\begin{matrix} -0.016 \\ -0.034 \end{matrix}$	20 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	1.98
SF-1X	19	21	17.5	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	21 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	1.73
SF-1T	19	22	15	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	1.56
SF-1T	19	22	17	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	1.76
SF-1T	19	22.23	19	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22.23 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	1.99
SF-1T	19	22.2	37.7	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22.2 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	3.94
SF-1T	19	22.2	42.5	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22.2 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	4.45
SF-1T	19	23	41	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	23 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	4.44
SF-1T	19.05	21	20.5	19.05 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	21 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	1.84
SF-1T	19.05	22.3	43	19.05 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22.3 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	4.52
SF-1T	19.1	23	4	19.1 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	23 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	0.85
SF-1X	20	22	20	20 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.07
SF-1X	20	23	20	20 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	23 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.17
SF-1T	20	23	25	20 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	23 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.71
SF-1T	20	23	39.7	20 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	23 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	4.30
SF-1T	22	25	23	22 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	25 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.71
SF-1T	22	25	25	22 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	25 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.95
SF-1T	23	27	28	23 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	27 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	3.56
SF-1X	25	28	10	25 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	28 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	1.32
SF-1T	25	28	15	25 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	28 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	1.98
SF-1T	25	28	24	25 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	28 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	3.17
SF-1X	25	28	25	25 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	28 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	3.30
SF-1T	26	29	37	26 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	29 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	5.06
SF-1X	27	30	32	27 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	30 $\begin{matrix} +0.025 \\ 0 \end{matrix}$	4.52
SF-1T	28	31	24	28 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	31 $\begin{matrix} +0.025 \\ 0 \end{matrix}$	3.51

# 液压泵行业JF-800/JF-720轴承应用规格

JF-800/JF-720 bushing specs recommended

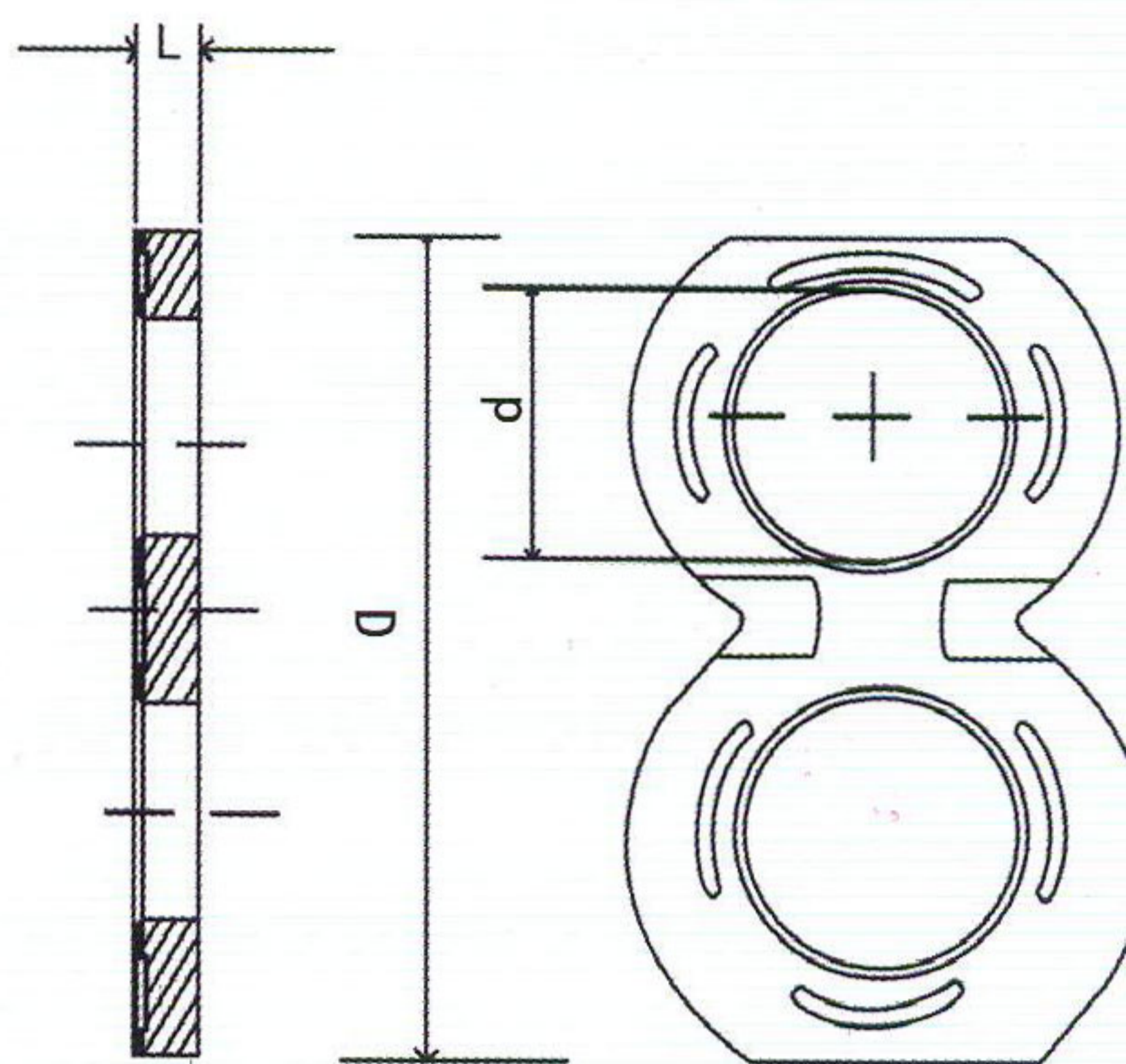


型号 Type	d	D	L	相配轴径 Shaft Dia	相配座孔 Housing Bore H7	价格 Unit Price RMB/EA
JF-800	10.3	13.5	10	10.3 $\begin{smallmatrix} -0.013 \\ -0.028 \end{smallmatrix}$	13.5 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	0.85
JF-800	14.224	19.45	11	14.224 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	19.45 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	1.21
JF-800	14.23	17	10	14.23 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	17 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	0.96
JF-800	15	17	15	15 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	17 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	1.44
JF-720	15	17	18.5	15 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	17 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	1.78
JF-720	15	17	20	15 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	17 $\begin{smallmatrix} +0.018 \\ 0 \end{smallmatrix}$	1.92
JF-720	15	18	39.5	15 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	18 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	4.02
JF-720	16	18	20	16 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	18 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	2.04
JF-720	16	19	17	16 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	19 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	1.83
JF-800	16.9	20.3	23	16.9 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	20.3 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	2.64
JF-720	17	20	14.7	17 $\begin{smallmatrix} -0.016 \\ -0.034 \end{smallmatrix}$	20 $\begin{smallmatrix} +0.021 \\ 0 \end{smallmatrix}$	1.66

型号 Type	d	D	L	相配轴径 Shaft Dia	相配座孔 Housing Bore H7	价格 Unit Price RMB/EA
JF-720	17	20	20	17 $\begin{matrix} -0.016 \\ -0.034 \end{matrix}$	20 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.26
JF-720	17	20.4	14.8	17 $\begin{matrix} -0.016 \\ -0.034 \end{matrix}$	20.4 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	1.71
JF-800	17	20.5	14.8	17 $\begin{matrix} -0.016 \\ -0.034 \end{matrix}$	20.5 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	1.72
JF-720	17.5	20.8	20	17.5 $\begin{matrix} -0.016 \\ -0.034 \end{matrix}$	20.8 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.35
JF-800	18	21.4	42	18 $\begin{matrix} -0.016 \\ -0.034 \end{matrix}$	21.4 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	5.08
JF-720	19	22	14	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	1.74
JF-720	19	22	17	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.11
JF-800	19	22	17.5	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.18
JF-800	19	22	18	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.24
JF-800	19	22	20	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.49
JF-800	19	22	38	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	4.73
JF-800	19	22	43	19 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	5.35
JF-800	19.05	22.3	43	19.05 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	22.3 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	5.42
JF-800	20	23.14	16	20 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	23.14 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.09
JF-800	22.225	25.4	18	22.225 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	25.4 $\begin{matrix} +0.021 \\ 0 \end{matrix}$	2.59
JF-800	26.2	33.3	18	26.2 $\begin{matrix} -0.020 \\ -0.041 \end{matrix}$	33.3 $\begin{matrix} +0.025 \\ 0 \end{matrix}$	3.39
JF-800	35	39	31	35 $\begin{matrix} -0.025 \\ -0.050 \end{matrix}$	39 $\begin{matrix} +0.025 \\ 0 \end{matrix}$	6.84
JF-800	37	41	44.5	37 $\begin{matrix} -0.025 \\ -0.050 \end{matrix}$	41 $\begin{matrix} +0.025 \\ 0 \end{matrix}$	8.60

# 齿轮泵侧板设计参考图

Side plates for gear pump



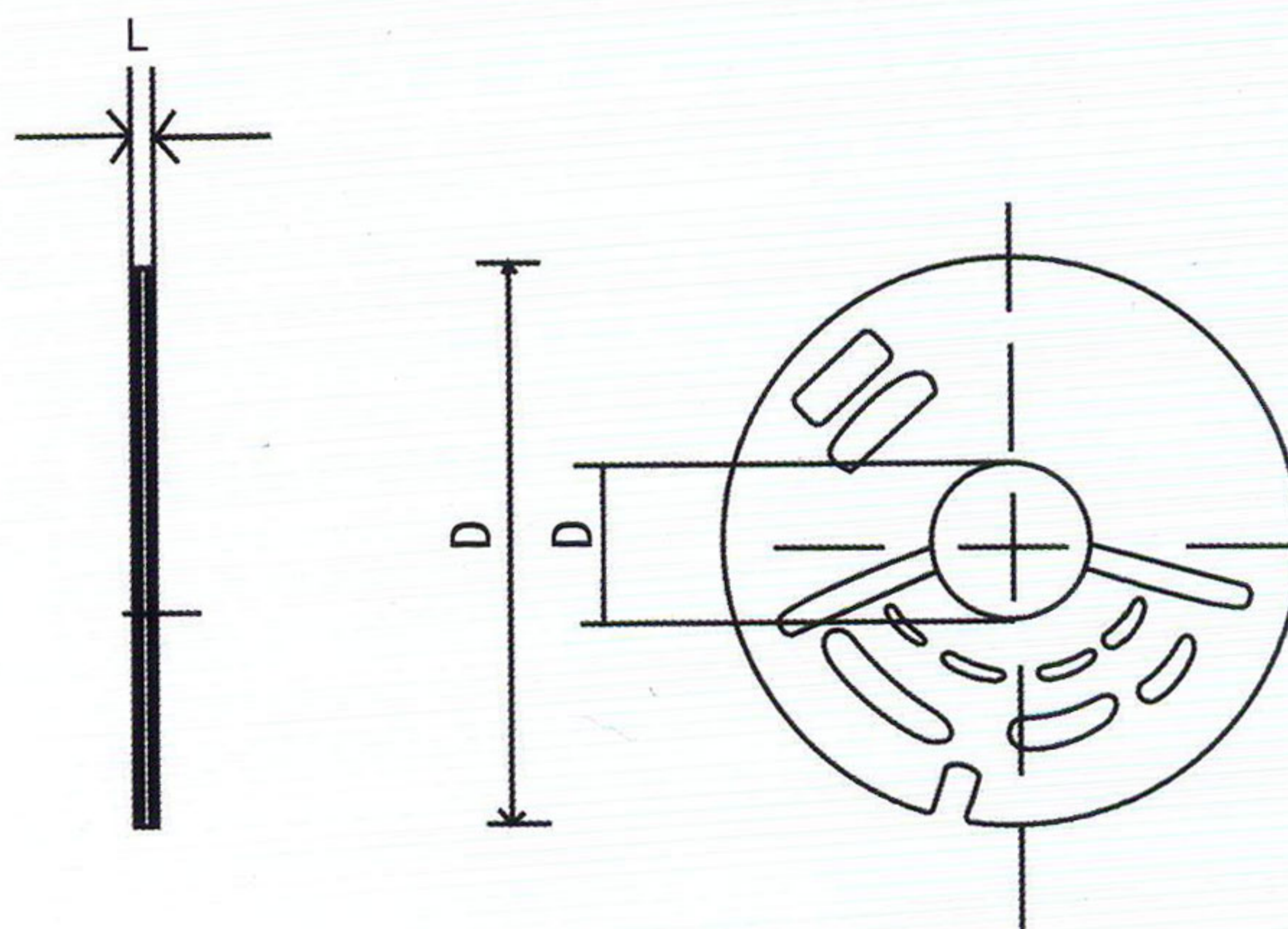
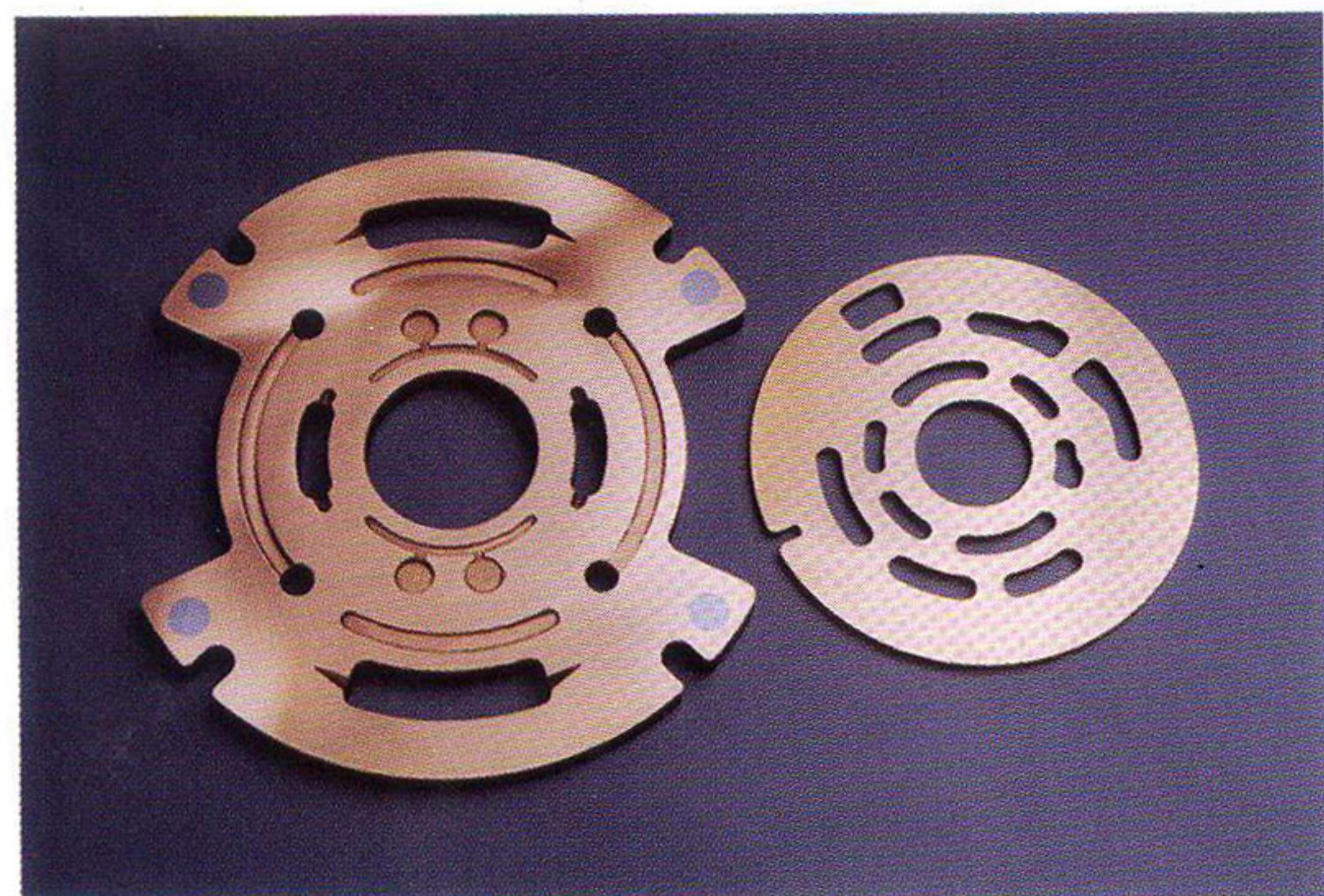
## 齿轮泵侧片应用规格

Dimensions of side plate recommended for gear pump

型号 Type	d	D	L	价格 Unit Price RMB/EA
JF800	14	64.6	3	21.13
JF800	14.5	76.5	8.3	38.54
JF800	17	67	5	22.45
JF800	19	82.3	3.8	34.45
JF800	20	87	8.3	45.42
JF800	22.3	57.15	3.25	16.32
JF800	22.3	63.5	3.25	20.16
JF800	22.3	63.5	4.19	24.20
JF800	23	77	6	35.58
JF800	24.99	48.41	1.5	7.00
JF800	25.3	96.3	5.1	51.00
JF800	28.8	113.6	5.6	64.52
JF800	33	117	5	68.45
JF800	33.4	132.6	7.6	105.50
Jf800	37.19	176.78	3.175	125.00

# 叶片泵磨擦片设计参考图

Side plates for vane pumps



## 叶片泵磨擦片应用规格

Dimensions of side plate recommended for vane pump

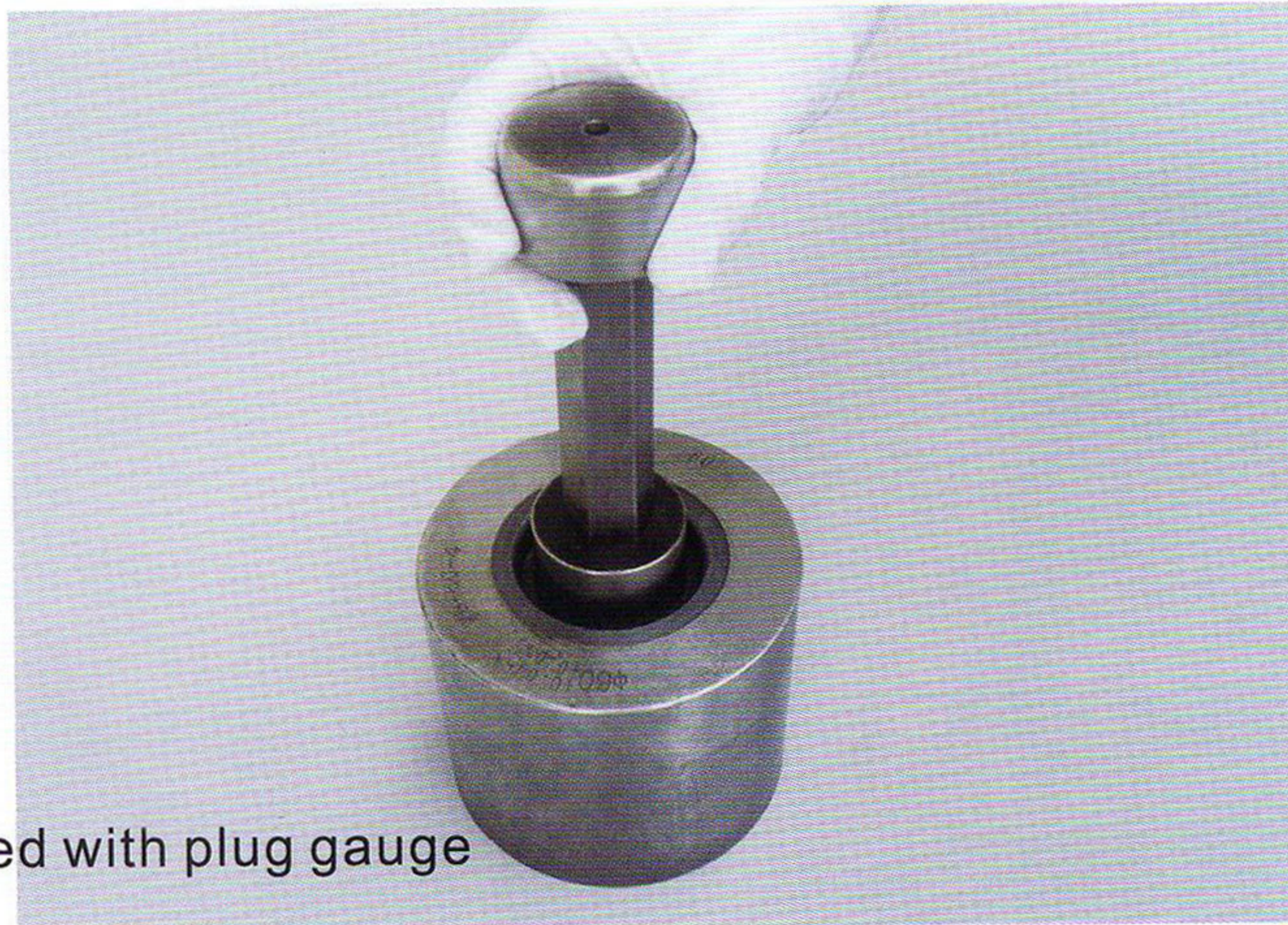
型号 Type	d	D	L	价格 Unit Price RMB/EA
JF800	48	85	5.7	43.35
JF800	48	81	6	39.37
JF800	49	85	6.2	43.35
JF800	50.063	105.41	5.232	55.56
JF800	53.98	124.46	7.62	92.94
JF800	54	97	7.5	56.45
JF800	55	97	6.2	51.75
JF800	55.94	103.94	2	17.48
JF800	59.3	103.34	6	34.32
JF800	60	106	7.2	38.16
JF800	60	110	8	39.60
JF800	61.9	138.43	8.53	56.00
JF800	62	116	6.7	43.15
Jf800	62.5	104.3	7.4	43.00

型号 Type	d	D	L	价格 Unit Price RMB/EA
JF800	62.9	103.3	3.5	32.76
JF800	66	104.3	8.3	44.62
JF800	67	122	8	53.13
JF800	68	104	2.4	28.29
JF800	69.9	154.15	10.49	142.30
JF800	70	120.8	7.2	87.85
JF800	70	120.8	6.9	87.85
JF800	70	130	2	45.50
JF800	77	125	3.1	48.13
JF800	77.5	138.5	5	53.86
JF800	80	139	7.2	115.93
JF800	86	118	4.5	69.62
JF800	86	151	8.2	136.81
JF800	88.5	152	8.1	138.62
JF800	90.3	136	5	110.98
JF800	93	162	7.2	157.46
JF800	95	170	11	216.75
JF800	95	177.5	2.2	67.45
JF800	97	173.2	11.1	224.47
JF800	102	245	2.5	87.47
JF800	102	245	2.8	87.47
JF800	111.25	154.69	5.26	119.65
JF800	124	177.8	5.1	158.00



# Bushing Dimensional Inspections

内径塞规检测



I.D checked with plug gauge

## 1 Million times strike test report

### 1. Condition of experiment

- 1.1 Testing device: 30KW Hydraulic pump striking test platform
- 1.2 Hydraulic oil adopted for the test: N46 Hydraulic oil
- 1.3 Oil temperature in test:  $80^{\circ}\text{C} \pm 5^{\circ}\text{C}$
- 1.4 Rotating speed in test: 3000r/min
- 1.5 Load in the test: 0~25MPa
- 1.6 Frequency of striking: 25~30 Times/Min

### 2. Hydraulic pump adopted for the test: CBK1012-A15F1 pump from Changjiang hydraulic factory

### 3. Technical standard adopted for the test

- 3.1 JB/T7041-93 <Hydraulic gear pump technical conditions>
- 3.2 JB/T7041-93 <Hydraulic gear pump testing method>
- 3.3 JB/T58211-93 <Hydraulic gear pump product quality ranking standard>

### 4. Testing process

- 4.1 Result of sampling inspection before test: No defect for bushing outlook. Press load 2.5~3.5KN. Bushing O.D 18.12~18.14. All the parts of testing pump are OK. O.D for the gear shaft is 17.995~18.00.
- 4.2 The striking test starts on 3rd June. Before the test, the plot ratio is 98.8% at temperature  $50^{\circ}\text{C}$ . Till 28th June, the striking counts up to 400117 times, and the plot ratio is 98.2% at temperature  $50^{\circ}\text{C}$ . The striking test continues to 705000 times, and the plot ratio is 96.5% at temperature  $50^{\circ}\text{C}$ . Till 6th September, the striking counts up to 1000222 times, and the plot ratio is 96% at temperature  $50^{\circ}\text{C}$ . The wearing out amount of the bushing is normal. No other special conditions took place in the test. The result conforms strictly with the requirements in clauses 3.1, 3.2, 3.3

### 5. Test conclusions

The bearing passed the 1 Million times strike test, conforms to the standard for best rank quality products

