

离合式气动阀门减速器(气动手轮机构)



特点

- 1、产品系列化，输出扭矩与气动装置、阀门相匹配。
- 2、体积小、重量轻，设计合理、式样新颖；
- 3、气动、手动两用。旋转偏心装置180°手柄位于手动(ON)位置，手动操作。手柄位于气动(OFF)位置，气动操作。
- 4、蜗轮连接内孔制作了相隔90°的两条键槽,以使用户根据选择装置同阀体相对的位置。
- 5、产品装有专用润滑脂，与阀装配后，整体密封、防尘、防水、防护等级为IP65。
- 6、注：26:1，38:1，54:1 为压铸铝箱体。

主要用途

本减速器与气动装置联合使用，用于开启90°的蝶阀、球阀等，实现手动或气动驱动。

使用说明

- 1、减速器底面与阀门连接，上支架面与气缸连接，阀轴配合穿过蜗轮内孔，阀轴端四方与气缸方孔配合；(工作过程：气动时，气缸带动阀轴、蜗轮同转。手动时，蜗杆与蜗轮啮合，带动阀轴转动，气缸活塞亦随动)。
- 2、手柄位于手动(ON)位置，手动操作，不能气动。拉出限位销，顺时针转动手柄至气动(OFF)、蜗轮、蜗杆脱开，实现气动。
- 3、手柄位于气动(OFF)时，气动操作，无法手动。拉出限位销，逆时针转动手柄至手动(ON)。蜗轮、蜗杆啮合，实现手动。气动切换手动过程中会出现顶齿现象，需转动手轮一个角度，确保蜗轮与蜗杆正确啮合，才能手动。
- 4、气动与手动不能同时驱动。

XLHJ系列手轮机构技术参数

序号 No	型号 Model	齿轮齿数比 Gear Ratio	输入力矩 Input Torque(Nm)	输出力矩 Output Torque(Nm)	重量 Weight(Kg)
1	XLHJ26	26:01:00	70	300	7.3
2	XLHJ38	38:01:00	60	550	11.8
3	XLHJ54	54:01:00	120	1200	17.3
4	XLHJ80	80:01:00	140	2000	35
5	XLHJ78A	78:01:00	200	3600	48.2
6	XLHJ98	98:01:00	300	9000	156
7	XLHJ100	100:01:00	400	13000	190
8	XLHJ118	118:01:00	900	22100	540

Hand-wheel Gear Box - XLHJ Series Gear Operator



Feature

- 1、Easy connection: There are two keyway apart 90° in the inner hole of worm gear so as to be convenient for customer to choose relative position between gear operator and valve.
- 2、Easy operating: Pull out the position pin and rotate off center device with 180° to realize pneumatic drive by positioning pin acted or to realize manual drive in the opposite way.
- 3、Dustproof and waterproof : The gear operator is filled with special lubricant before leaving the factory. It is solid sealed with valve after installation possessing dustproof and waterproof function with protecting grade IP65.
- 4、Many Output torques: It consists of a series of products, so output torque matches with all kinds of pneumatic devices and valves.

Design

Armed with the idea of the small in volume, light in weight and novel in pattern, we designed and developed the XLHJ series gear operators which are widely applied in the area of valve automation control. These kinds of products were specially designed used for butterfly valve, ball valve and plug valve together with pneumatic actuator.

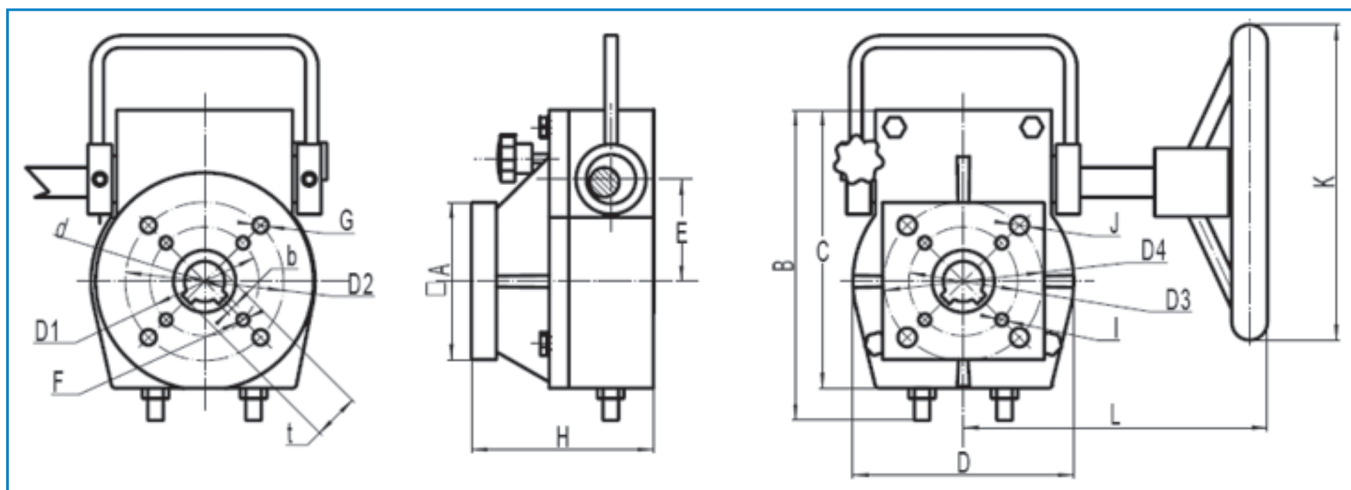
Operating principle

- 1, Assembling procedures: The bottom of gear operator should be connected with valve, bracket surface connected with cylinder (actuator), valve stem go through the inner hole of worm gear and the square on the end of stem matches with square hole of cylinder (actuator).
- 2, Operating procedures: The cylinder (actuator) drives valve stem and worm gear rotating together when pneumatic drive and worm shaft meshes with worm gear to drive valve stem rotating along with piston of cylinder (actuator) moving when manual drive. When pneumatic drive, pull out the pneumatic drive by worm gear rotating following with pneumatic valve stem. Just make the worm shaft mesh to realize manual drive.

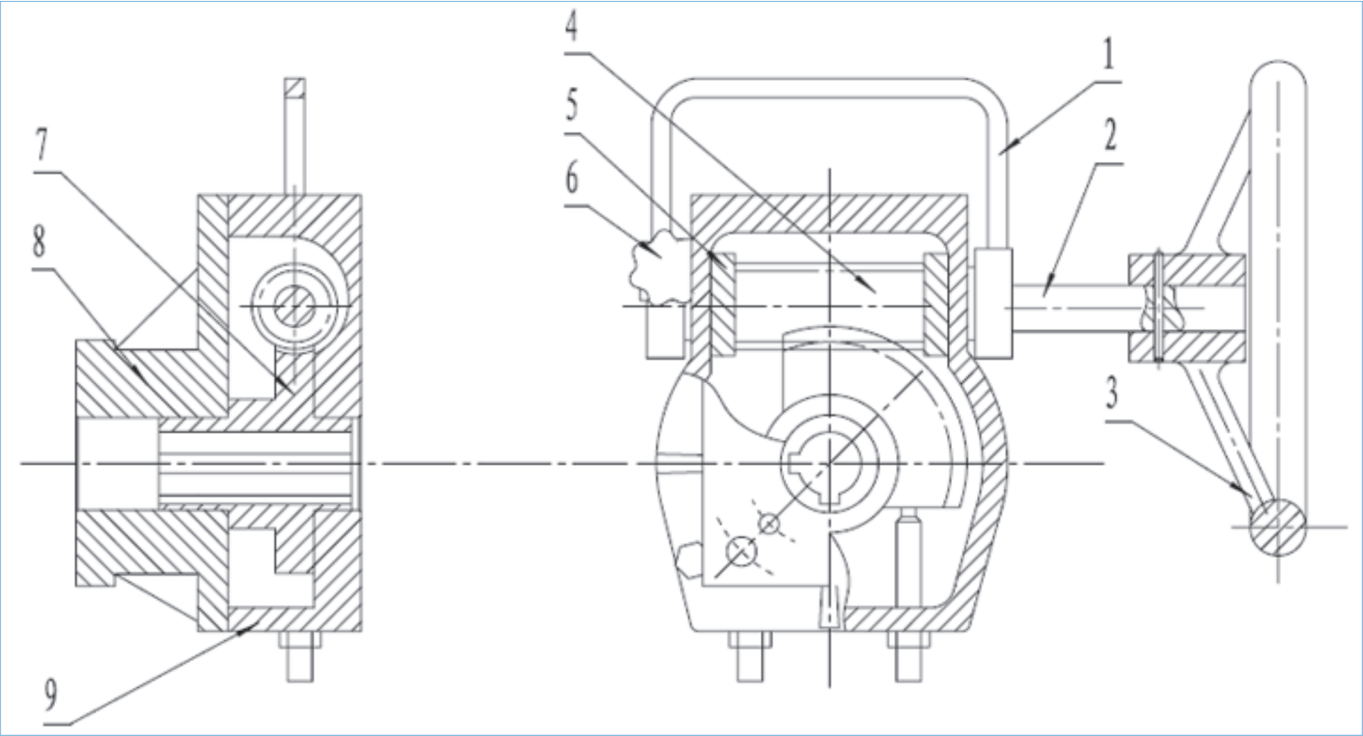
Material and Parts

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XLHJ系列手轮机构连接尺寸表



Model	d	b	t	D1	F	D2	G	A	H	E	D3	I	D4	J	K	L	B	C	D
XLHJ26:1	22	6	25			70	M8	70	99	51			70	Φ9	Φ200	155	160	145	110
XLHJ38:1	26	8	29	70	M8			100	117	65	70	Φ9			Φ200	195	195	175	140
	38	10	41			102	M10	110					102	Φ12					
XLHJ54:1	38	10	41	125	M12			130	118	85	125	Φ14			Φ300	205	235	215	180
	48	14	52			140	M16						140	Φ18					
XLHJ80:1	48	14	52	140	M16			156	148	124	140	Φ18			Φ400	245	320	298	250
	60	18	64			165	M20						165	Φ22					
XLHJ78:1	60	18	64	165	M20			220	150	142	165	Φ22							
	80	22	86												Φ600	265	360	340	285
XLHJ98:1	80	22	86	165	M20			230	195	229	165	Φ22			Φ800	410	550	530	460
XLHJ100:1	100	28	107	254	M16			300	195	258	254	Φ18			Φ800	430	605	585	520
XLHJ118:1	120	32	129	356	M30			Φ445	250	391	356	Φ32			Φ1000	550	900	870	800
	180	45	196	483	M36			Φ600	275	390	483	Φ39			Φ600	600	1050	900	850



NO	部件 Part	数量 Qty	材质 Material	Optional material
1	手柄 Handle	1	Carbon steel	
2	涡轮杆 Worm shaft	1	45 GB699-88	
3	手轮 Hand wheel	1	HT200 GB 9439-88	WCB GB12229-88
4	蜗杆 Worm	1	45 GB699-88	
5	偏心套组件 Off-center sleeve sub-assembly	1	Carbon steel	
6	限位螺杆 positioning screw	1	Carbon steel	
7	涡轮 Worm gear	1	QT500-7 GB1348-88	
8	支架盖 Bracket cap	1	HT200 GB 9439-88	WCB GB12229-88
9	壳体 Body	1	HT200 GB 9439-88	WCB GB12229-88