

K-val[®]

Intelligent Process Control
Build A Quality

M-SERIES MANUAL CLUTCH



■ Main application manual

The company's products are used in petroleum, chemical, pharmaceutical, water treatment, power plants, nuclear power and other places, for 90 degrees open ball valves, butterfly valves, plug valves and other valves supporting the use of the company's supply of manual clutch can also be used according to customer requirements on the product speed ratio, use temperature, protection level, anti-corrosion level Adjust customization. The company is based on domestic and international markets, Customers mainly from the Middle East, Europe and the United States and other well-known foreign valve enterprises

■ Main uses of products

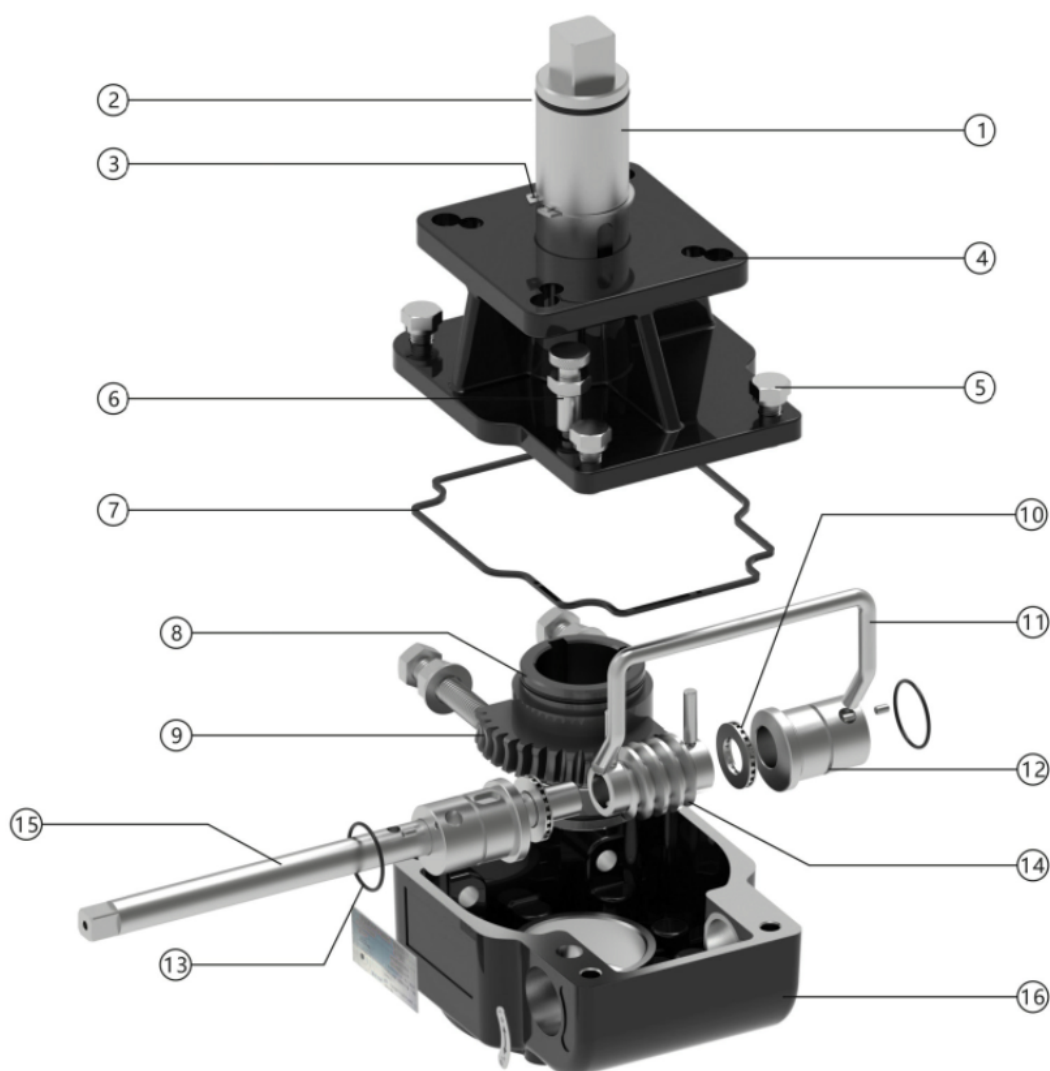
The manual clutch is combined with the pneumatic actuator assembly to realize manual or pneumatic drive for butterfly valves, ball valves, etc. which are opened at 90° degrees

■ Characteristic

1. It is small in size , light in weight and reasonable in design
2. Products are serialized and output torque is matched with pneumatic devices
3. Turbine connection holes have two key ways 90 degrees apart so that users can choose the relative position of the device with the valve according to their needs
4. Lifting the limit pulling ring, rotating the eccentric device 90 degree limit pin automatic limit , to achieve pneumatic , otherwise to achieve manual
5. Product factory , equipped with special grease , and valve assembly, the overall seal , dust-proof , waterproof , protection grade IP65 , IP67. IP68 optional

■ Technical parameters

Model	Configuration of actuator		15005211 Standard flange				Handwheel diameter	Speed ratio	N.m	Ambient Temperature (degC)
			Connecting dimensions of valves		Connecting dimensions of actuator					
	AT Double action(DA)	AT Spring return(SR)	Center distance	Alxe hole	Center distance	Alxe hole				
M1	DA83-92	SR75-83	F05/F07	14x14	F05/F07	14x14	180	38:1	180	Standard: -20 ~70 Low option: -35 ~ 70
M2	DA100-125	SR88-105	F07 /F10	17x17	F07/F10	17x17	200	37:1	320	
M3	DA125-145	SR115-125	F07/F10/F12	22x22	F10/F12	22x22	280	35:1	680	
M4	DA160-190	SR145-160	F10/F12or F14	27x27	F10/F12orF14	27x27	320	50:1	1200	
M5	DA210-240	SR190-210	F14orF16	36x36	F14orF16	36x36	400	54:1	2100	
M6	DA240-270	SR210-240	F16	46x46	F16	46x46	500	58:1	3000	
M7	DA270-300	SR240-270	F16/<p200	46x46	F16/<p200	46x46	600	66:1	3800	
M8	DA270-300	SR240-270	F16	46×46	F16	46×46	500	100: 1	4300	
M9	DA350-400	SR350	F25	46x46	F25	46x46	500	320: 1	6000	
M10	BTS4	BTS4	F25orF30	55×55	F25orF30	55×55	500	450: 1	15000	

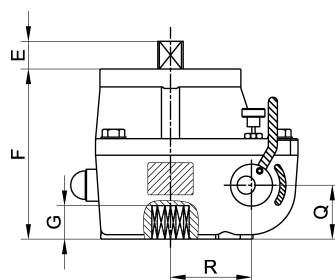
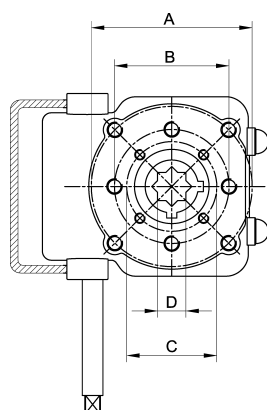


Main components and materials

NO.	Name	Material Scienc	NO.	Name	Material Scienc
1	Drive spindle	AISI 1045	9	Worm gear	Spheroidal graphite cast iron
2	Seal ring	Nitrle rubber	10	Plane bearing	Alloy steel
3	Reed spring	Stainless steel(304)	11	Handle	Stainless steel (304)
4	Upper cover	Aluminium alloy	12	Eccentric sleeve	Alloy steel
5	A fastening	Stainless steel(304)	13	Seal ring	N,trile rubber
6	Positioning pin	Alloy steel	14	Worm	AISI 1045
7	Seal ring	Nitrile rub ber	15	Transmission rod	AISI 1045
8	Seal ring	Nitrle rubber	16	Box	M1-M7 Aluminium alloy M8-M10 Ductile iron

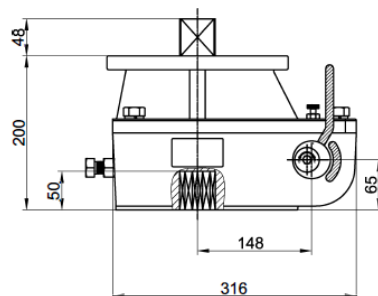
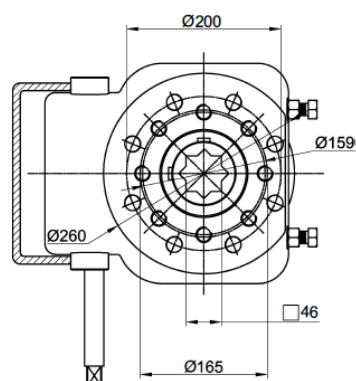
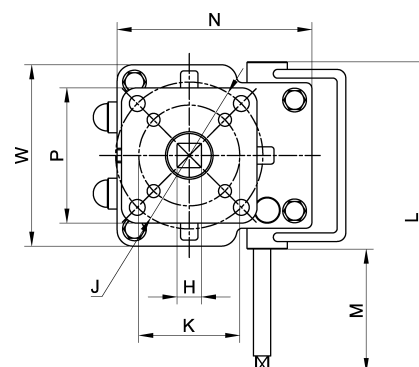
Hand wheel: Carbon alloy steel

Connecting dimensions of valves

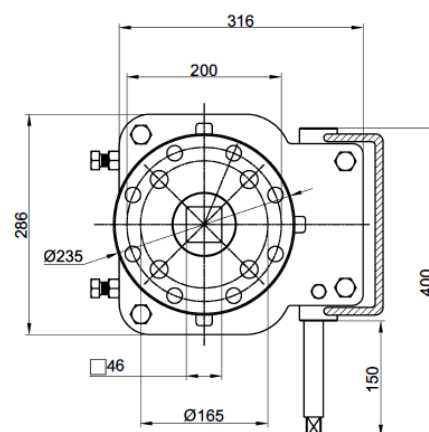


M1-M6 Size Diagram

Connecting dimensions of actuator

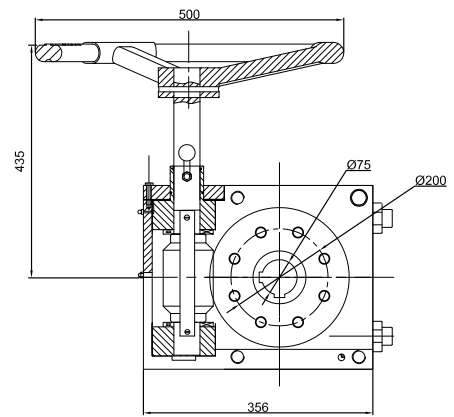
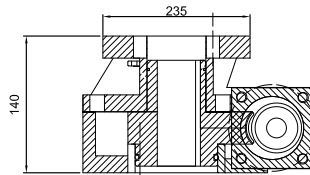
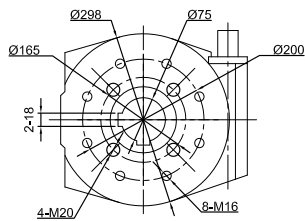


M7 Size Diagram

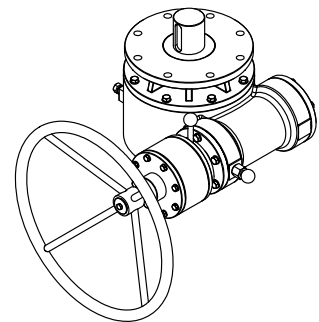
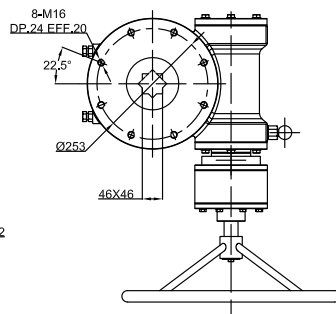
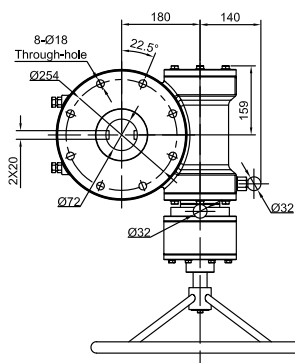
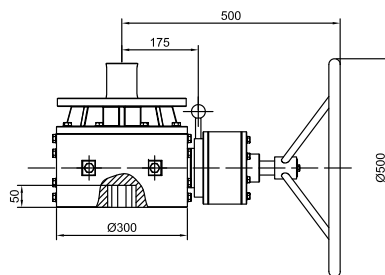
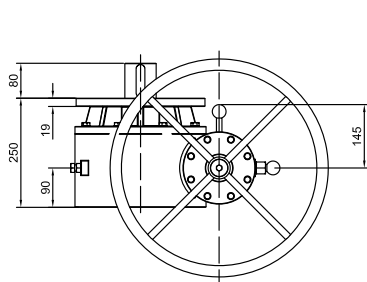


■ Connection size

Specifation model	M1	M2	M3	M4	M5	M6	M7
A	F07	F07	F12	F14	F16	F16	F16
B	°57	φ70	°89	°108	°108	°159	°159
C	F07	F07	F07/F10	F10/F12	F14	F14	°200
D	14*14	17*17	22*22	27*27	36*36	46*46	46*46
E	17	19	22	28	38	48	48
F	105	110	130	165	185	200	200
G	20	22	28	32	40	50	50
H	14*14	17*17	22*22	27*27	36*36	46*46	46*46
N	115	135	160	202	245	288	316
W	90	125	140	187	221	252. 5	286.5
J	F07	F10	F12	F14	F16	F16	F16
K	F05	F07	F10	F10/F12	F14	/	°2 00
L	180	220	257	330	370	400	421
M	71	92	113	148	148	160	170
p	70	94	113	129	165	165	°235
Q	33	36	39	56	58. 5	62	65
R	44	54	65	82	109	134	148
Handwheel outer diameter	°180	φ200	φ280	φ320	°4 00	φ500	φ600
Reference weight	3	4.5	7	13.7	22	32.2	38

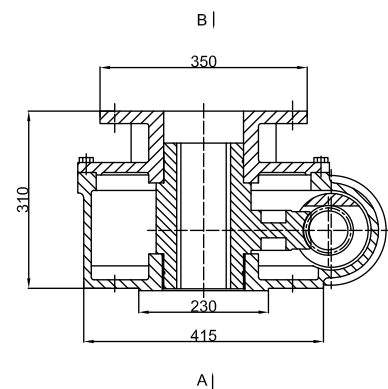
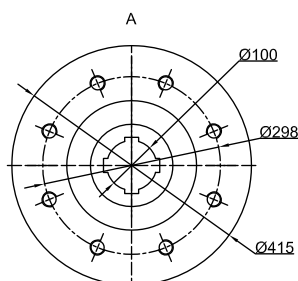
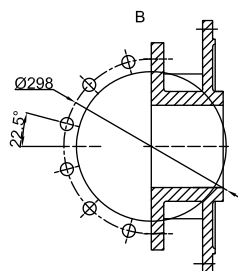
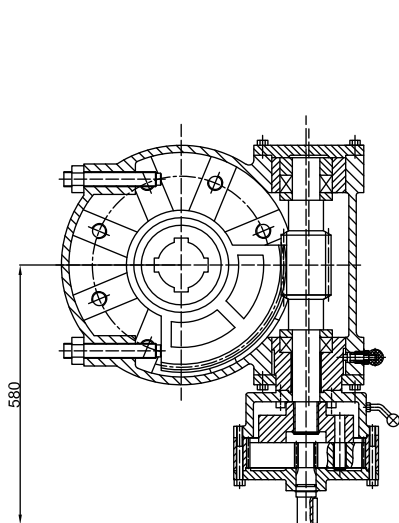


M8 Size Diagram



Speed ratio: 320:1
Input torque : 300 N.M
Output torque : 6000 N.M

M9 Size Diagram



Speed ratio: 450:1 Input
torque : 450 N.M
Output torque: 15000 N.M

M10 Size Diagram

