



Instruction

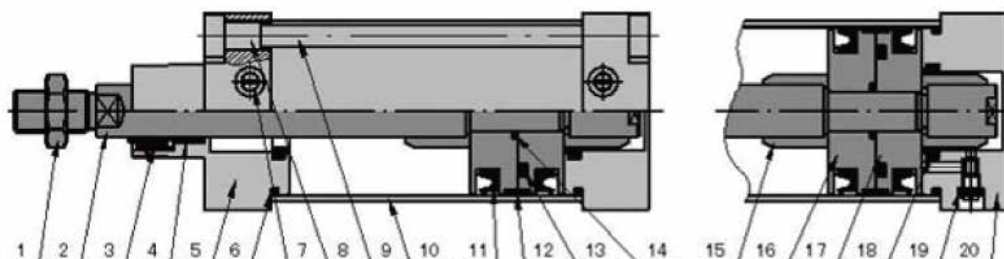
LP series of pneumatic piston actuator is designed on the basis of F series pneumatic actuator, displacing the complicated electronic control by simple mechanical action. It specially meets the demands of high safety factor and working conditions like petroleum, gas and chemical liquid transportation.

Feature

1. Actuator with travel stopper is designed for easy travel position setting;
2. Aluminium alloy is adopted for DN80-250 cylinder, seamless steel for cylinder above DN250.
3. Chromium-plated carbon steel is used for driven rod, stainless steel for option.
4. Mounting bed is detachable for convenient installation.
5. Rotary stem connection is applied to ease mounting and stroke adjusting.
6. Spring rod nut of spring return actuator is locked to prevent wrong disassembly.
7. Outside color is available for custom-made.
8. Contact us if special demands on thrust, travel and pressure are required.



Structure of cylinder DN80-DN250 actuator

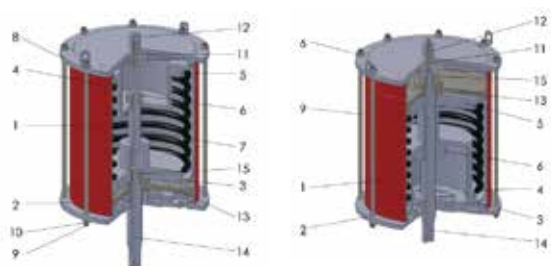


Item	Part Name
1	Nut
2	Piston rod
3	seal combination valve (for rod)
4	Sleeve bearing
5	Cylinder cover
6	O Ring
7	Regulating valve
8	Nut
9	Connection bolt
10	Cylinder

Item	Part Name
11	Y Ring
12	Support ring
13	Piston ring
14	O Ring
15	Dashpot plunger
16	Piston
17	Piston
18	Seal ring
19	O Ring
20	Cylinder cover

Structure of cylinder DN280-DN1000 actuator

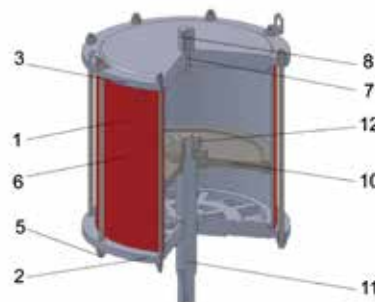
Spring return actuator



Fail to closing Fail to opening

Item	Part Name
1	Body
2	Cylinder cover
3	Seat for spring
4	Spring
5	Nut
6	Rod
7	Cylinder cover
8	Cylinder cover
9	Bolt
10	Nut
11	Piston
12	Piston rod
13	Lock nut

Double acting actuator

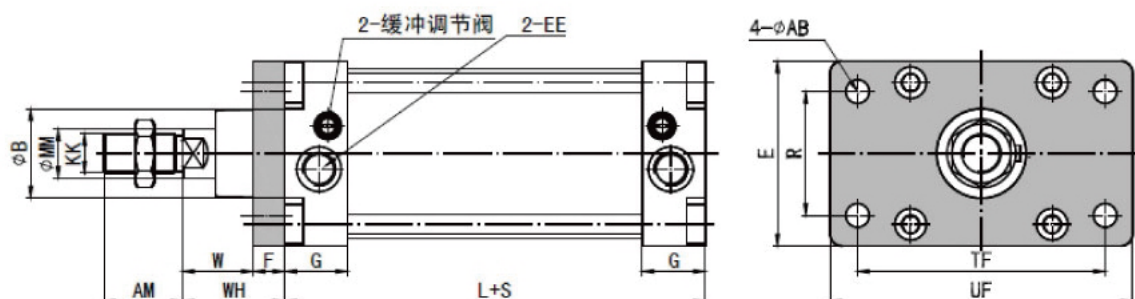


Item	Part Name
1	Cylinder
2	Cylinder cover
3	Cylinder cover
4	Nut
5	Bolt
6	O Ring
7	Stop screw
8	Stop nut
9	Piston
10	Locking nut

Output of double acting actuator

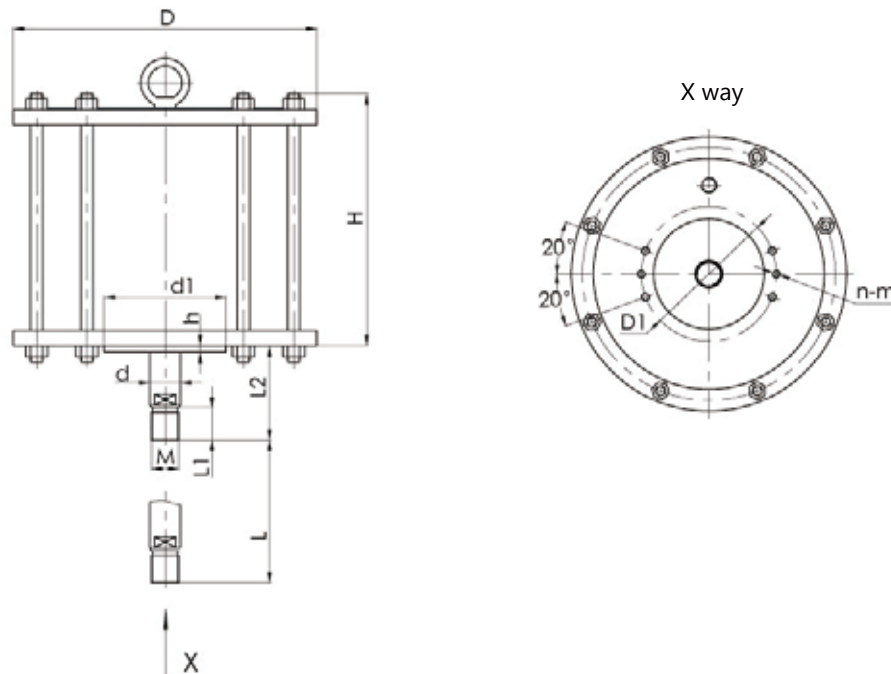
Cylinder (mm)	Piston rod (mm)	Output of cylinder													
		3Bar		3.5Bar		4Bar		4.5Bar		5Bar		5.5Bar		6Bar	
		Thrust (N)	Pulling (N)	Thrust (N)	Pulling (N)	Thrust (N)	Pulling (N)	Thrust (N)	Pulling (N)	Thrust (N)	Pulling (N)	Thrust (N)	Pulling (N)	Thrust (N)	Pulling (N)
DN80	25	1507	1360	1758	2587	2010	1813	2261	2040	2512	2267	2763	2493	3014	2720
DN100	25	2355	2208	2478	2576	3140	2944	3533	3312	3925	3680	4318	4048	4710	4418
DN125	32	3680	3439	4293	4012	4906	4585	5520	5158	6133	5731	6746	6304	7259	6877
DN160	40	6029	5652	7034	6594	8033	7536	9043	8478	10048	9420	11053	10362	12058	11304
DN200	40	9420	9043	10990	10550	12560	12058	14130	13565	15700	15072	17570	16579	18840	18086
DN250	40	14719	14342	17172	16732	19625	19123	22078	21513	24531	23903	26984	26294	29438	28684
DN280	40	18463	18086	21540	21101	24618	24115	27695	27130	30772	30144	33849	33158	36926	36173
DN320	40	24115	23738	28134	27695	32154	31651	36173	35808	40192	39564	44211	43520	48230	47477
DN350	40	28849	28472	33657	33217	38465	37963	43273	42708	48081	47453	52886	52199	57698	56944
DN400	40	37680	37303	43960	43520	50240	49738	56520	55965	62800	62172	69080	68389	75360	74606
DN450	50	47689	47100	55637	54850	63585	62800	71533	70650	79481	78500	87429	86350	95378	94200
DN500	60	58875	58027	68688	67698	78500	77370	88313	87041	98125	96712	107988	106383	117750	116054
DN550	60	73853	73005	86162	85173	98470	97340	110779	109508	123088	121675	135397	133843	147706	146010
DN600	60	84780	83932	98910	97921	113040	111910	127170	125898	141300	139887	155430	153876	169560	167864
DN630	60	93470	92622	109048	108059	124627	123496	140205	138933	155783	154370	171362	169807	186940	185244
DN700	60	115395	114547	134628	133638	153860	152730	173083	171821	192325	190912	211558	210003	230790	229094
DN800	70	150720	149566	178540	174494	200960	199421	226060	224349	251200	249277	276320	274204	301440	299132
DN900	70	190755	189601	222548	221201	254340	252801	286133	284402	317925	316002	349718	347602	381210	379202
DN1000	80	23550	233993	274750	272992	314000	311990	353250	350989	392500	389988	431750	428987	471000	467986

Dimension of cylinder DN80-DN250 actuator



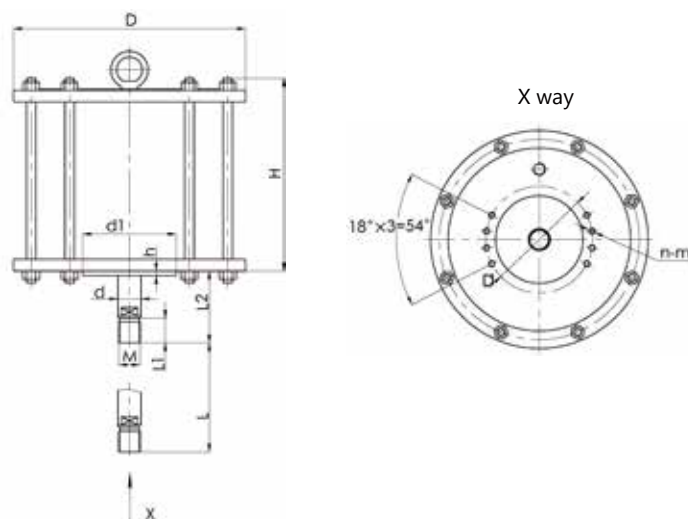
Cylinder	AB	AM	B	E	EE	F	G	KK	L	MM	R	TF	UF	W	WH
DN80	12	40	45	94	G3/8"	16	32	M20X1.5	128	25	63	126	154	29	46
DN100	14	40	55	112	G1/2"	16	37	M20X1.5	138	25	75	150	185	35	51
DN125	16	54	60	140	G1/2"	20	42	M27X2	160	32	90	180	220	41	65
DN160	18	72	80	180	G3/4"	20	45	M36X2	180	45	115	230	280	60	80
DN200	22	72	80	220	G3/4"	25	50	M36X2	180	45	135	270	320	65	95
DN250	26	84	95	280	G1"	25	50	M42X2	190	50	165	330	390	80	105

Dimension of cylinder DN280-DN400 actuator



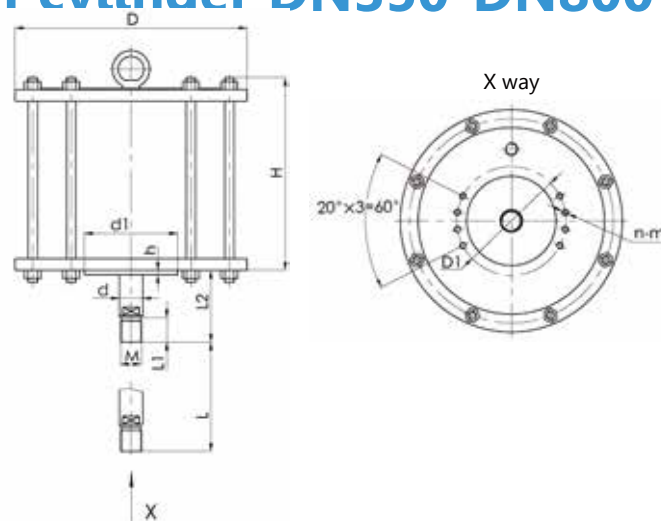
Model	d	M	L1	L2	L	H	h	d1	D1	n-m	D
280-A	φ 36d9	M33X2-6g	56	80	Pls advise	185+L	6	φ 140d9	φ 180	6-M10┘16	φ 355
310-A	φ 36d9	M33X2-6g	56	80		185+L	6	φ 140d9	φ 180	6-M10┘16	φ 395
280-B	φ 40d9	M33X2-6g	56	80	Pls advise	185+L	6	φ 160d9	φ 195	6-M12┘20	φ 355
320-B	φ 40d9	M33X2-6g	56	80		185+L	6	φ 160d9	φ 195	6-M12┘20	φ 395
350-B	φ 40d9	M33X2-6g	56	80		185+L	6	φ 160d9	φ 195	6-M12┘20	φ 425
400-B	φ 40d9	M33X2-6g	56	80		185+L	6	φ 160d9	φ 195	6-M12┘20	φ 490

Dimension of cylinder DN350-DN800 actuator



Model	d	M	L1	L2	L	H	h	d1	D1	n-m	D
350-B2	φ 50d9	M42X2-6g	56	80	Pls advise	185+L	6	φ 200d9	φ 238	8-M14┘22	φ 425
400-B2	φ 50d9	M42X2-6g	56	80		190+L	6	φ 200d9	φ 238	8-M14┘22	φ 490
450-B2	φ 50d9	M42X2-6g	56	80		190+L	6	φ 200d9	φ 238	8-M14┘22	φ 540
450-C3	φ 60d9	M48X2-6g	65	110	Pls advise	190+L	7	φ 228d9	φ 252	8-M14┘22	φ 540
500-C3	φ 60d9	M48X2-6g	65	110		190+L	7	φ 228d9	φ 252	8-M14┘22	φ 595
560-C3	φ 60d9	M48X2-6g	65	110		190+L	7	φ 228d9	φ 252	8-M14┘22	φ 650
600-C3	φ 60d9	M48X2-6g	65	110		190+L	7	φ 228d9	φ 252	8-M14┘22	φ 692
630-C3	φ 60d9	M48X2-6g	65	110		190+L	7	φ 228d9	φ 252	8-M14┘22	φ 725
560-D4	φ 70d9	M56X2-6g	65	115	Pls advise	195+L	7	φ 235d9	φ 285	8-M16┘26	φ 650
600-D4	φ 70d9	M56X2-6g	65	115		195+L	7	φ 235d9	φ 285	8-M16┘26	φ 690
630-D4	φ 70d9	M56X2-6g	65	115		195+L	7	φ 235d9	φ 285	8-M16┘26	φ 725
700-D4	φ 70d9	M56X2-6g	65	115		215+L	7	φ 235d9	φ 285	8-M16┘26	φ 795
800-D4	φ 70d9	M56X2-6g	65	115		215+L	8	φ 235d9	φ 285	8-M16┘26	φ 905

Dimension of cvlinder DN350-DN800 actuator



Model	d	M	L1	L2	L	H	h	d1	D1	n-m	D
800-E5	φ 80d9	M64X2-6g	65	115	Pls advise	215+L	8	φ 340d9	φ 380	8-M22┘35	φ 900
900-E5	φ 80d9	M64X2-6g	65	115		215+L	8	φ 340d9	φ 380	8-M22┘35	φ 1010

Optional manual device



Screw Manual



Gear Manual



Hydraulic Manual

How to Order

1	2	3	4	5
Series	Cylinder	Acting Type	Spring	Operation
E: Linear	80:DN80 100:DN100 1000:DN1000	DA: Double Acting SR: Spring Return	C: Fail to Closed O: Fail to Open	SM: Screw Manual GM: Gear Manual HM: Hydraulic Manual

Example

E-500-DA-HM

Series	Cylinder	Acting Type	Spring	Operation
Linear	500mm	Double Acting	Non	Hydraulic Manual