



TI-P368-01-US  
Issue 2

## DC Series diaphragm actuator

### Description

The DC Series are type diaphragm pneumatic actuators used to operate linear displacement valves in modular or block control system.

It is a versatile equipment which makes possible the change of direct acting for inverse acting, with no need of additional parts.

Due to the component responsibility for an adequate valve performance, for maintenance purposes, use only original parts supplied by HITER.

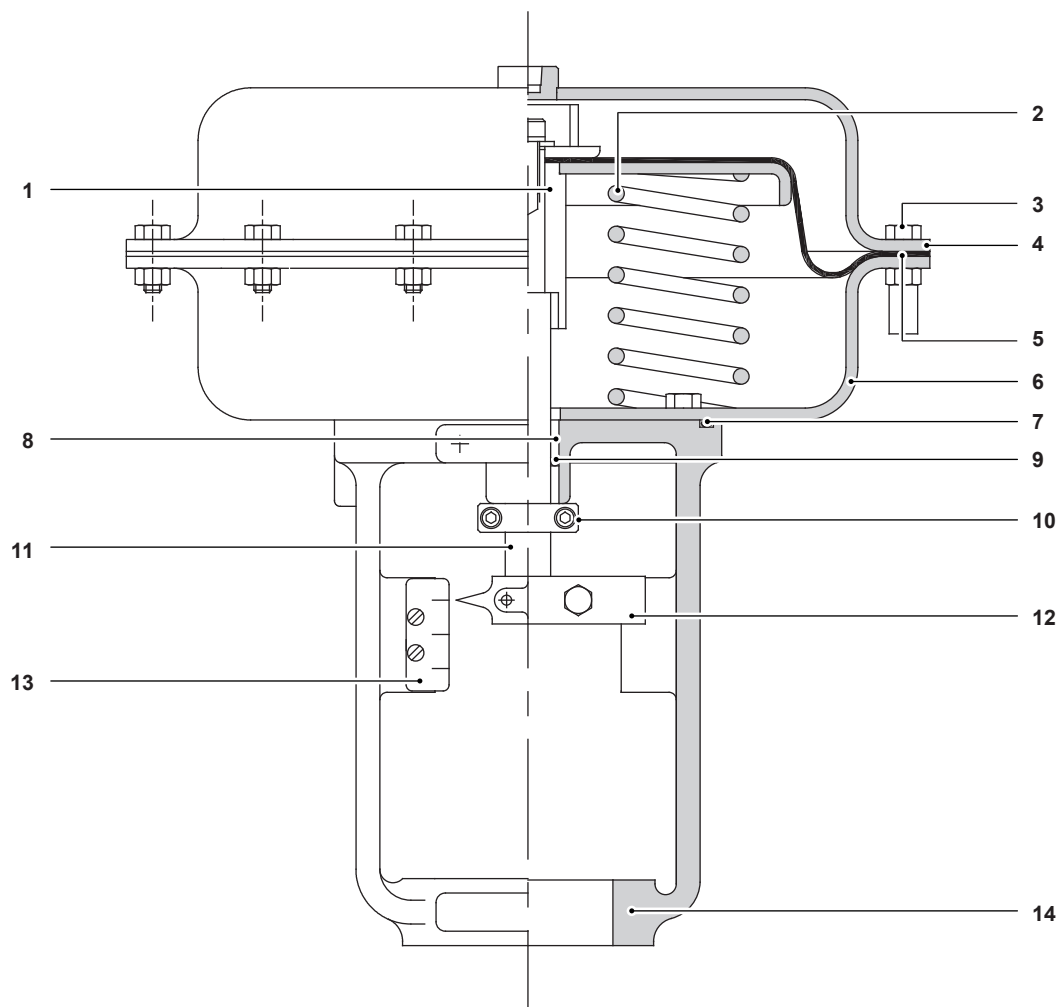
Generally actuators and diaphragm are supplied assembled in valves, although they can also be supplied in separate.



### Technical specifications

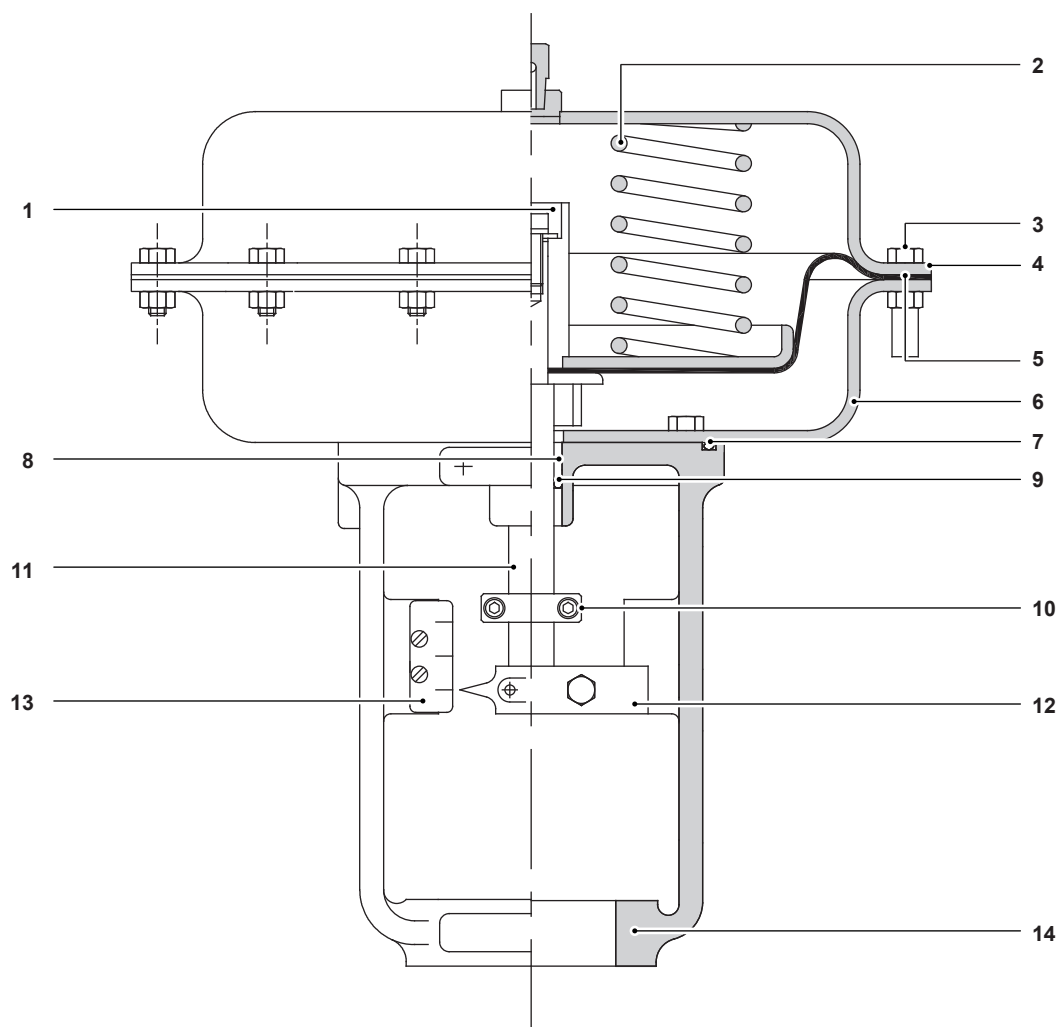
Characteristics	Linear pneumatic diaphragm/spring actuator Units without handwheel are completely field reversible		
Manual operator (optional)	Top handwheel for manual operation or stroke limiting can be supplied		
Air pressure supply	50 psi g (3.4 bar g) maximum		
Actuator specifications	Size	Diaphragm effective area (in²)	Maximum stroke (in)
	02	16.00 (103.2 cm²)	7⁄16 (1.11 cm)
	03	47.40 (305.8 cm²)	
	06		¾ (1.90 cm)
	07	70.58 (455.4 cm²)	1 1⁄8 (2.86 cm)
	08		
	09	106.62 (687.9 cm²)	2 (5.08 cm)
	10	154.38 (996 cm²)	
Spring range	3 to 15, 12 to 30 or 16 to 40 psi g (0.21 to 1.03, 0.83 to 2.07 or 1.10 to 2.76 bar g)		

## Materials - Direct actuator



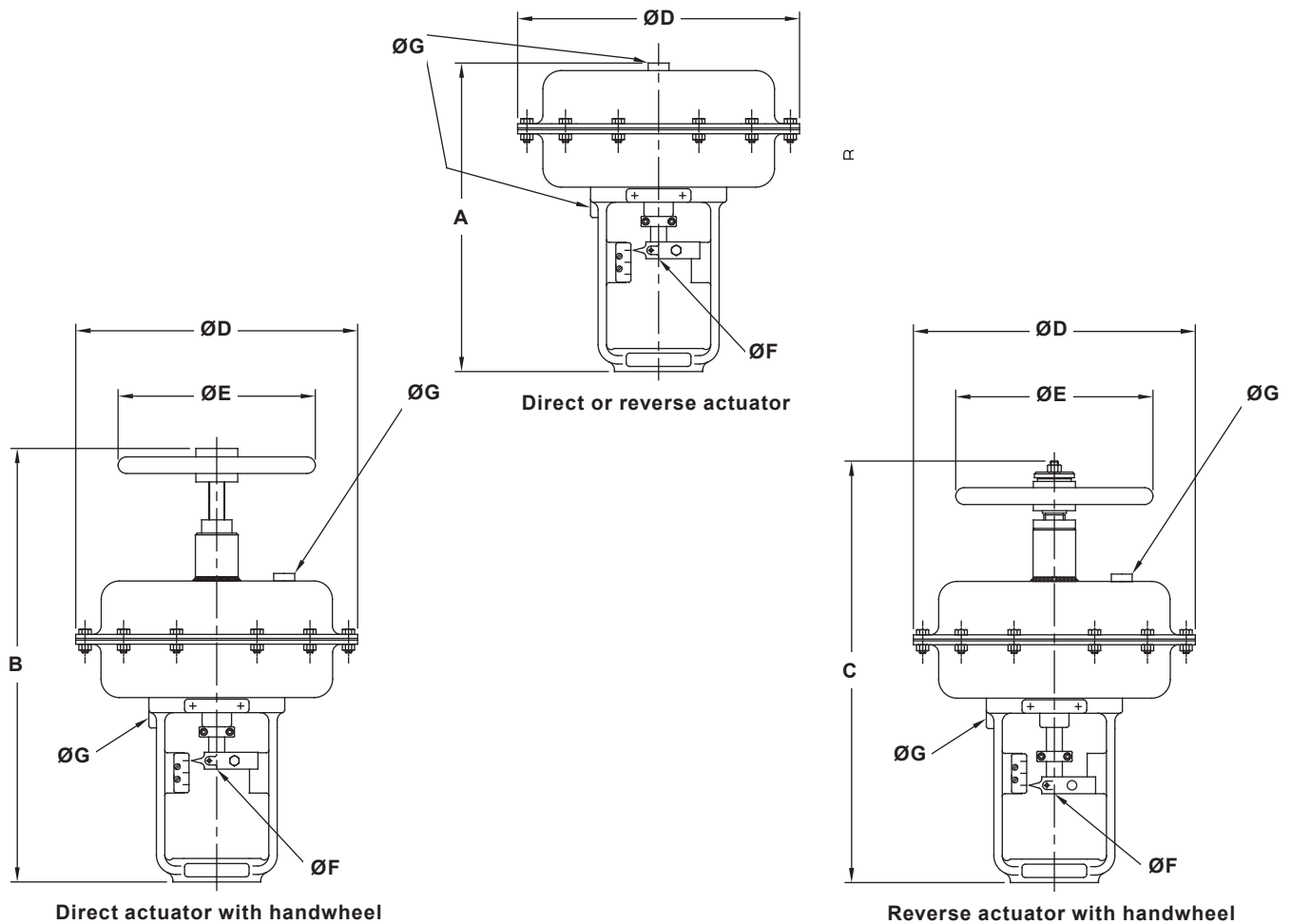
No.	Part	Material
1	Stroke limiter	Carbon steel
2	Spring	Carbon steel
3	Compression bolt	Carbon steel with Z coated
4	Upper case	Carbon steel
5	Diaphragm	NBR elastomer
6	Lower case	Carbon steel
7	'O' ring	NBR elastomer
8	Guide sleeve	Brass
9	'O' ring	NBR elastomer
10	Spring regulator	Stainless steel
11	Stem	Stainless steel
12	Connector	Carbon steel
13	Stroke indicator	Stainless steel
14	Yoke	Casting iron

## Materials - Reverse actuator



No.	Part	Material
1	Stroke limiter	Carbon steel
2	Spring	Carbon steel
3	Compression bolt	Carbon steel with Z coated
4	Upper case	Carbon steel
5	Diaphragm	NBR elastomer
6	Lower case	Carbon steel
7	'O' ring	NBR elastomer
8	Guide sleeve	Brass
9	'O' ring	NBR elastomer
10	Spring regulator	Stainless steel
11	Stem	Stainless steel
12	Connector	Carbon steel
13	Stroke indicator	Stainless steel
14	Yoke	Casting iron

## Sizes and dimensions (approximate) in inches (mm)



Size	A	B	C	ØD	ØE	ØF (THREADED CON.)	ØG
02	8.35" (212.09 mm)	11.8" (299.72 mm)	12.2" (309.88 mm)	7.48" (189.99 mm)	6.50" (165.1 mm)	¼"-28UNF	⅝"-27NPT
03	9.22" (234.19 mm)	15.3" (388.62 mm)	15.7" (398.78 mm)	11.3" (287.02 mm)	9.26" (235.20 mm)	¼"-22UNF	¼"-18NPT
06	12.3" (312.42 mm)	18.4" (467.36 mm)	18.7" (474.98 mm)			⅜"-24UNF	¼"-18NPT
07	13.4" (340.36 mm)	19.4" (492.76 mm)	19.8" (502.92 mm)	13.3" (337.82 mm)		⅜"-24UNF	¼"-18NPT
08	13.8" (350.52 mm)	19.9" (505.46 mm)	20.3" (515.62 mm)			½"-20UNF	¼"-18NPT
09	17.5" (444.5 mm)	24.9" (632.46 mm)	25.9" (657.86 mm)	16.2" (411.48 mm)	13.4" (340.36 mm)	½"-20UNF	¼"-18NPT
10	19.5" (495.3 mm)	28.0" (711.2 mm)	26.8" (680.72 mm)	18.8" (477.52 mm)	18.9" (472.44 mm)	¾"-16UNF	¼"-18NPT

## Accessories

Pneumatic positioner, electro-pneumatic positioner, smart positioner, air filter/regulator, limit switch, electro-pneumatic transducer, solenoid valve, and others.