

**FlowAct™**  
**High Performance Actuator**  
125 - 3000 cm<sup>2</sup>, 0,25 - 60 kN



## Application

For installation on control valves, direct or reverse action, for controlled or on/off operation.

## Product features

- Multi-spring compact design
- Radial spring arrangement permits a low mounting height
- Low volume between diaphragm and case gives fast response times
- Strong operating force by permissible pressure supply of 6 bar / 87 psig
- Permissible ambient temperature - 40 up to 80°C / - 40 up to 176°F
- Stable guided stem
- Fabric-reinforced roll-type diaphragm with minimum area variation due to stem position on loss in operating force for various stroke positions - linearity is retained
- Stem bushing requires no maintenance
- Stable yoke in spheroidal cast-iron
- Central mounting on the control valve
- Yoke and stem coupling with mounting surfaces according to NAMUR (DIN IEC 65 B CO)
- Top resp. lateral mounted hand wheel

## Operation

The diaphragm is actuated by the control signal. The actuator stem moves as soon as the diaphragm force exceeds the counterforces of the springs. There are two operational modes depending on the arrangement of the spring package:

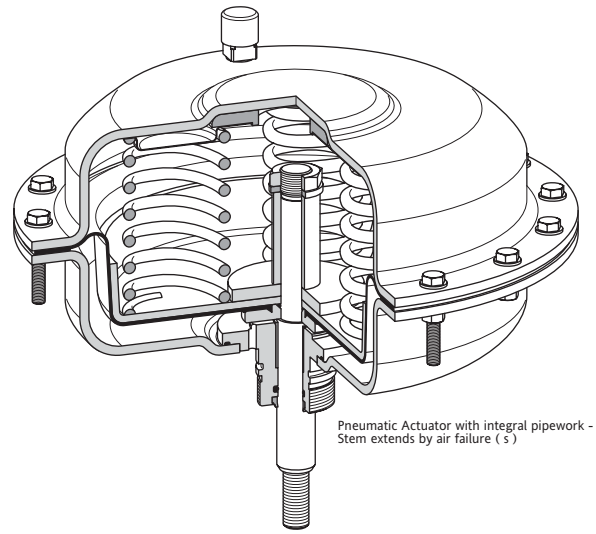
1. Stem extends by air failure
2. Stem retracts by air failure

The control valve can be opened or closed with a rising signal. On air failure, the actuator is set back to the zero position by spring force (fail-safe position).

**Quality assurance system certified acc. EN ISO 9001 : 2000 including product development.**

## The System

**Actuator**



O-Rings

Lock nut

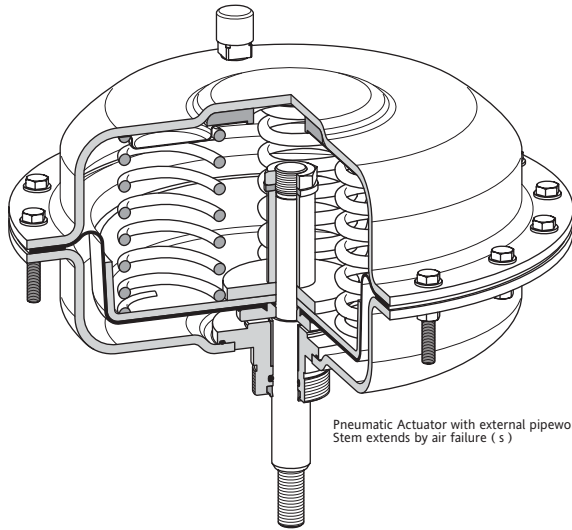
**Yoke**

Without Yoke for valve type:  
FLOWPAK

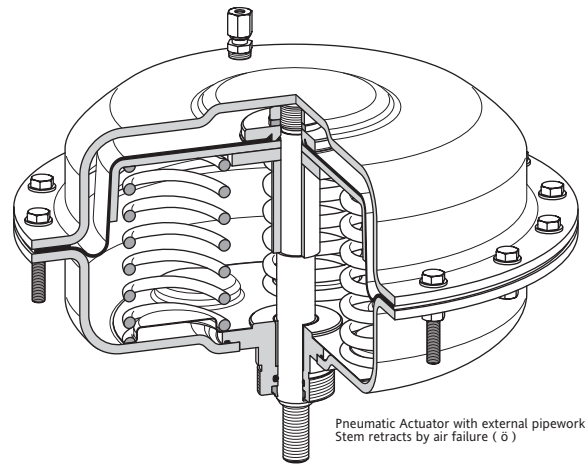
MULTI-Yoke for valve type:  
FLOWTOP  
FLOWPRO

Within the series the following combinations of yoke and valve types are possible:

# FlowAct™ - High Performance Actuator

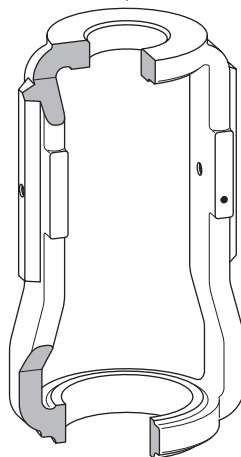
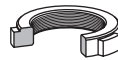


Pneumatic Actuator with external pipework -  
Stem extends by air failure ( s )



Pneumatic Actuator with external pipework -  
Stem retracts by air failure ( o )

Lock nut



NAMUR-Yoke  
for valve type:  
FLOWTOP  
FLOWPRO  
VARI-COOL

Actuator Size	Effective Area (cm <sup>2</sup> )	Stroke (mm)	Spring Ranges (bar)	Yoke Type (see Page 15)	Stem extends by Air failure							
					nec. Air Supply (bar)	max. Force (N)	max. Air Supply (bar)	max. Force (N)	1,6	1,8		
127	125	10	0,8 - 1,6	P	B	1,8	1 000	6,0	5 500		250	
			1,4 - 2,4			2,6	1 750	6,0	4 500			
			2,7 - 4,1			4,3	3 375	6,0	2 375			
		20	0,2 - 1,0			1,2	250	6,0	6 250	750	1 000	
			0,5 - 1,9			2,1	625	6,0	5 125			
			1,0 - 2,4			2,6	1 250	6,0	4 500			
			1,5 - 2,7			2,9	1 875	6,0	4 500			
			1,5 - 3,8			4,0	1 875	6,0	2 750			
			2,0 - 4,8			5,0	2 500	6,0	1 500			
			0,8 - 1,6			1,8	2 000	6,0	11 000		500	
252	250	10	1,4 - 2,4	P	T	2,6	3 500	6,0	9 000			
			2,7 - 4,1			4,3	6 750	6,0	4 750			
			0,2 - 1,0			1,2	500	6,0	12 500	1 500	2 000	
		20	0,5 - 1,9			2,1	1 250	6,0	10 250			
			1,0 - 2,4			2,6	2 500	6,0	9 000			
			1,5 - 2,7			2,9	3 750	6,0	8 250			
			1,5 - 3,8			4,0	3 750	6,0	5 500			
			2,0 - 4,8			5,0	5 000	6,0	3 000			
			0,2 - 1,0			1,2	1 000	6,0	25 000	3 000	4 000	
			0,5 - 1,9			2,1	2 500	6,0	20 500			
502	500	20	1,0 - 2,4	P	B	2,6	5 000	6,0	18 000			
			1,5 - 2,7			2,9	7 500	6,0	16 500			
			1,5 - 3,8			4,0	7 500	6,0	11 000			
		40	2,0 - 4,8			5,0	10 000	6,0	6 000			
			0,2 - 1,0			1,2	1 000	6,0	25 000	3 000	4 000	
			0,5 - 1,9			2,1	2 500	6,0	20 500			
			1,0 - 2,4			2,6	5 000	6,0	18 000			
			1,5 - 2,7			2,9	7 500	6,0	16 500			
			1,5 - 3,8			4,0	7 500	6,0	11 000			
			2,0 - 4,8			5,0	10 000	6,0	6 000			
700	700	20	1,8 - 2,7	P	T	2,9	12 600	6,0	23 100			
			2,3 - 3,4			3,6	16 100	6,0	18 200			
			3,0 - 4,2			4,4	21 000	6,0	12 600			
		40	0,2 - 1,0			1,2	1 400	6,0	35 000	4 200	5 600	
			0,5 - 1,9			2,1	3 500	6,0	28 700			
			1,0 - 2,4			2,6	7 000	6,0	25 200			
			1,5 - 2,7			2,9	10 500	6,0	23 100			
			1,5 - 3,8			4,0	10 500	6,0	15 400			
			2,0 - 4,8			5,0	14 000	6,0	8 400			
			0,2 - 1,0			1,2	1 400	6,0	35 000	4 200	5 600	
60	0,5 - 1,9	2,1	3 500	6,0	28 700							
	1,0 - 2,4	2,6	7 000	6,0	25 200							
	1,5 - 3,8	4,0	10 500	6,0	15 400							
	2,0 - 4,8	5,0	14 000	6,0	8 400							
	1502	1500	20	0,8 - 1,6	P	B	1,8	12 000	5,6	60 000		3 000
				1,5 - 2,1			2,3	22 500	6,0	58 500		
				0,2 - 1,0			1,2	3 000	5,0	60 000	9 000	12 000
40			0,4 - 2,0	2,2			6 000	6,0	60 000			
			0,75 - 1,4	1,6			11 250	5,4	60 000	3 000	6 000	
			1,5 - 2,7	2,9			22 500	6,0	49 500			
			2,0 - 3,5	3,7			30 000	6,0	37 500			
			2,6 - 4,2	4,4			39 000	6,0	27 000			
			0,2 - 1,0	1,2			3 000	5,0	60 000	9 000	12 000	
			0,4 - 2,0	2,2			6 000	6,0	60 000			
60	0,75 - 1,4	1,6	11 250	5,4	60 000	3 000	6 000					
	1,5 - 2,7	2,9	22 500	6,0	49 500							
	2,0 - 3,5	3,7	30 000	6,0	37 500							
	2,6 - 4,2	4,4	39 000	6,0	27 000							
	0,2 - 1,0	1,2	3 000	5,0	60 000	9 000	12 000					
	0,4 - 2,0	2,2	6 000	6,0	60 000							
	0,75 - 1,4	1,6	11 250	5,4	60 000	3 000	6 000					
80	1,5 - 2,7	2,9	22 500	6,0	49 500							
	2,0 - 3,5	3,7	30 000	6,0	37 500							
	2,6 - 4,2	4,4	39 000	6,0	27 000							
	0,2 - 1,0	1,2	3 000	5,0	60 000	9 000	12 000					
	0,4 - 2,0	2,2	6 000	6,0	60 000							
	0,75 - 1,4	1,6	11 250	5,4	60 000	3 000	6 000					
	1,5 - 2,7	2,9	22 500	6,0	49 500							
3002	3000	40	0,2 - 1,0	P	B	1,2	6 000	3,0	60 000	18 000	24 000	
			0,4 - 2,0			2,2	12 000	4,0	60 000			
			0,75 - 1,4			1,6	22 500	3,4	60 000	6 000	12 000	
		60	1,0 - 2,4			2,6	30 000	4,4	60 000			
			1,3 - 2,1			2,3	39 000	4,1	60 000			
			2,0 - 3,5			3,7	60 000	5,5	60 000			
			0,2 - 1,0			1,2	6 000	3,0	60 000	18 000	24 000	
			0,4 - 2,0			2,2	12 000	4,0	60 000			
			0,75 - 1,4			1,6	22 500	3,4	60 000	6 000	12 000	
			1,0 - 2,4			2,6	30 000	4,4	60 000			
80	1,3 - 2,1	2,3	39 000	4,1	60 000							
	2,0 - 3,5	3,7	60 000	5,5	60 000							
	0,2 - 1,0	1,2	6 000	3,0	60 000	18 000	24 000					
	0,4 - 2,0	2,2	12 000	4,0	60 000							
	0,75 - 1,4	1,6	22 500	3,4	60 000	6 000	12 000					
	1,0 - 2,4	2,6	30 000	4,4	60 000							
	1,3 - 2,1	2,3	39 000	4,1	60 000							

# FlowAct™ - High Performance Actuator

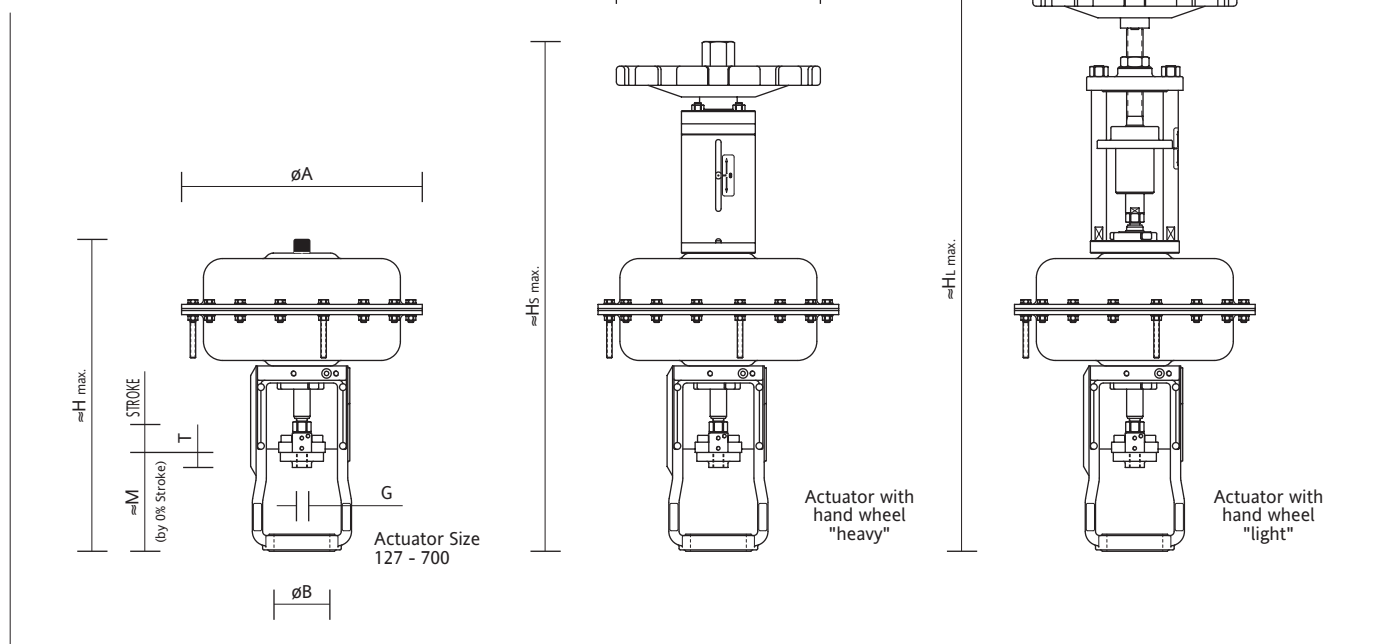
Stem retracts by Air failure Actual Air Supply (bar) / Produced Force (N)								
2,0	2,2	2,5	2,8	3,2	3,6	4,0	4,5	5,0
500	750	1 125	1 500	2 000	2 500	3 000	3 625	4 250
1 250	1 500	1 875	2 250	2 750	3 250	3 750	4 375	5 000
	375	750	1 125	1 625	2 125	2 625	3 250	3 875
1 000	1 500	2 250	3 000	4 000	5 000	6 000	7 250	8 500
2 500	3 000	3 750	4 500	5 500	6 500	7 500	8 750	10 000
250	750	1 500	2 250	3 250	4 250	5 250	6 500	7 750
5 000	6 000	7 500	9 000	11 000	13 000	15 000	17 500	20 000
500	1 500	3 000	4 500	6 500	8 500	10 500	13 000	15 500
5 000	6 000	7 500	9 000	11 000	13 000	15 000	17 500	20 000
500	1 500	3 000	4 500	6 500	8 500	10 500	13 000	15 500
5 000	6 000	7 500	9 000	11 000	13 000	15 000	17 500	20 000
500	1 500	3 000	4 500	6 500	8 500	10 500	13 000	15 500
5 000	6 000	7 500	9 000	11 000	13 000	15 000	17 500	20 000
500	1 500	3 000	4 500	6 500	8 500	10 500	13 000	15 500
7 000	8 400	10 500	12 600	15 400	18 200	21 000	24 500	28 000
700	2 100	4 200	6 300	9 100	11 900	14 700	18 200	21 700
6 000	9 000	13 500	18 000	24 000	30 000	36 000	43 500	51 000
	1 500	6 000	10 500	16 500	22 500	28 500	36 000	43 500
15 000	18 000	22 500	27 000	33 000	39 000	45 000	52 500	60 000
	3 000	7 500	12 000	18 000	24 000	30 000	37 500	45 000
9 000	12 000	16 500	21 000	27 000	33 000	39 000	46 500	54 000
15 000	18 000	22 500	27 000	33 000	39 000	45 000	52 500	60 000
	3 000	7 500	12 000	18 000	24 000	30 000	37 500	45 000
9 000	12 000	16 500	21 000	27 000	33 000	39 000	46 500	54 000
15 000	18 000	22 500	27 000	33 000	39 000	45 000	52 500	60 000
	3 000	7 500	12 000	18 000	24 000	30 000	37 500	45 000
9 000	12 000	16 500	21 000	27 000	33 000	39 000	46 500	54 000
30 000	36 000	45 000	54 000					
	6 000	15 000	24 000	36 000	48 000	60 000		
18 000	24 000	33 000	42 000	54 000				
30 000	36 000	45 000	54 000					
	6 000	15 000	24 000	36 000	48 000	60 000		
18 000	24 000	33 000	42 000	54 000				
30 000	36 000	45 000	54 000					
	6 000	15 000	24 000	36 000	48 000	60 000		
18 000	24 000	33 000	42 000	54 000				
30 000	36 000	45 000	54 000					
	6 000	15 000	24 000	36 000	48 000	60 000		
18 000	24 000	33 000	42 000	54 000				

Boiler Air Flow (bar)	Produced Force (N)
2,4	625
3,4	1 250
4,2	1 875
5,3	1 875
2,4	1 250
3,4	2 500
4,2	3 750
5,3	3 750
2,4	2 500
3,4	5 000
4,2	7 500
5,3	7 500
2,4	2 500
3,4	5 000
4,2	7 500
5,3	7 500
4,5	12 600
5,7	16 100
2,4	3 500
3,4	7 000
4,2	10 500
5,3	10 500
2,4	3 500
3,4	7 000
5,3	10 500
2,4	12 000
3,6	22 500
2,4	6 000
2,2	11 250
4,2	22 500
5,5	30 000
2,4	6 000
2,2	11 250
4,2	22 500
5,5	30 000
2,4	12 000
2,2	22 500
3,4	30 000
3,4	39 000
5,5	60 000
2,4	12 000
2,2	22 500
3,4	30 000
3,4	39 000
5,5	60 000
2,4	12 000
2,2	22 500
3,4	30 000
3,4	39 000
5,5	60 000

ATTENTION: • The max. air supply has picked out for a long operating life !  
 ( Stem  $\varnothing = 12 \text{ mm} \leq 13\ 500 \text{ N}$ ,  $\varnothing = 16 \text{ mm} \leq 23\ 000 \text{ N}$ ,  $\varnothing = 20 \text{ mm} \leq 38\ 000 \text{ N}$  )  
 • Max. design pressure for the actuators 6 bar !

# Dimensions - DIN-Units

## MULTI-Yoke



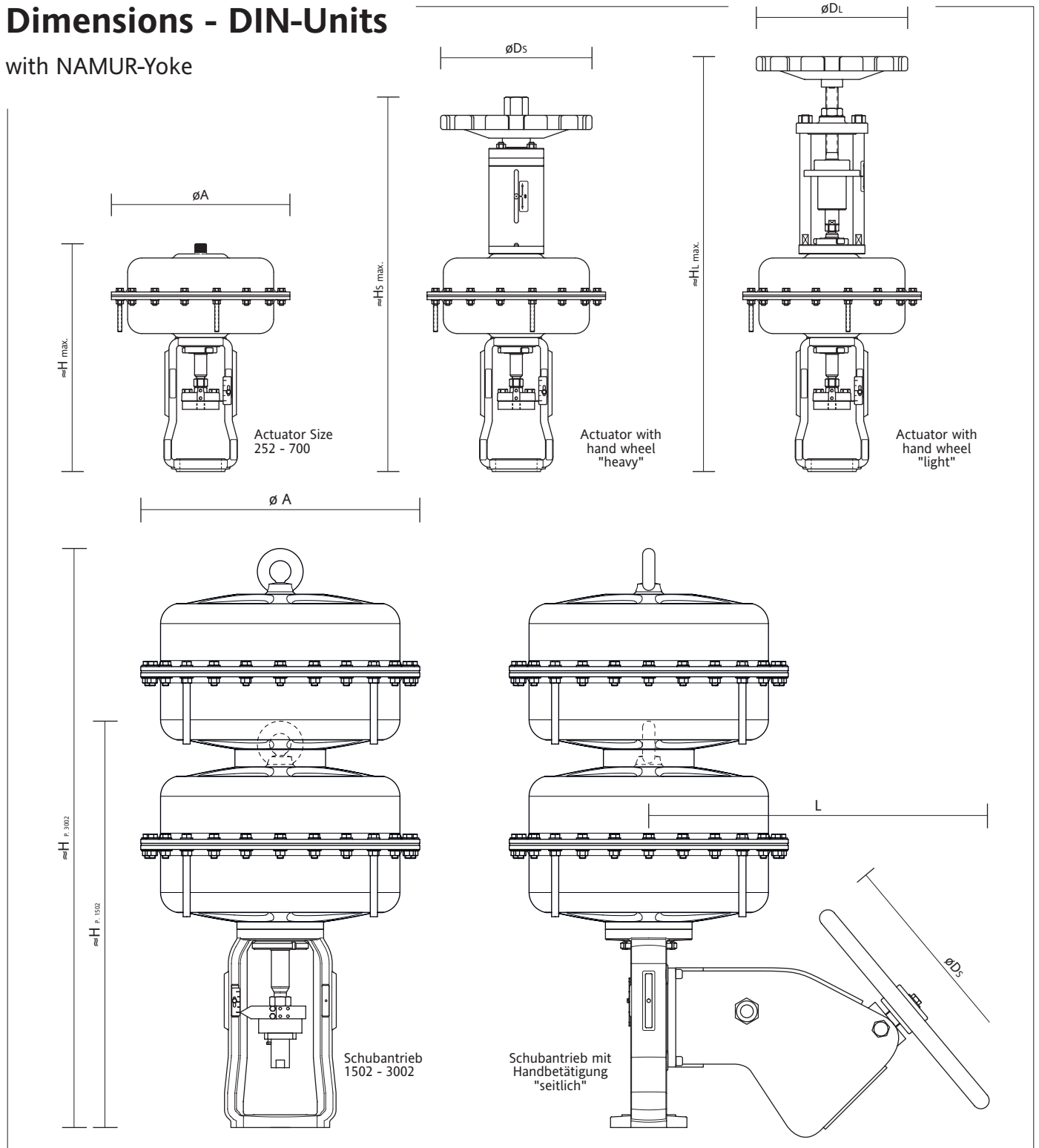
Designation	Actuator Size	127		252		502		700	
		Stroke		10, 20 mm		20 mm	40 mm	20 mm	40 mm
ø A	mm	198	265	352	352	405	405		
≈ H max.	mm	320	335	455	460	545	550		
≈ Hs max.	mm	515	520	740	745	870	875		
≈ Hl max.	mm	590	595	845	870	-	-		
ø Ds	mm	160	200	250	250	350	350		
ø Dl	mm	200	200	300	300	-	-		
≈ Weight	kg	9	14	29	29	40	40		
≈ Weight with top mounted hand wheel "heavy"	kg	15	20	38	38	58	58		
≈ Weight with top mounted hand wheel "light"	kg	14	19	36	36	-	-		

## Yoke-Dimensions DIN-Units

Yoke dimensions		MULTI-Yoke for FlowTop, FlowPro				NAMUR-Yoke for FlowTop, FlowPro, VariCool							
Actuator Size	Stroke	øB	≈M	G	T	øB	≈M	G	T	øB	≈M	G	T
127	10	65	110	M12	23	-	-	-	-	-	-	-	-
	20	65	105	M12	23	-	-	-	-	-	-	-	-
252	10	65	110	M12	23	-	-	-	-	-	-	-	-
	20	65	105	M12	23	65	105	M12	16	65	105	M12	16
502	20	65	105	M12	23	65	105	M12	16	82	150	M16	20
	40	82	140	M16	25	82	140	M16	20	82	140	M20	20
700	20	65	105	M12	23	65	105	M12	16	82	150	M16	20
	40	82	140	M16	25	82	140	M16	20	82	140	M20	20
1 502	60	-	-	-	-	82	150	M20	20	-	-	-	-
	20	-	-	-	-	65	105	M12	29	82	150	M16	29
	40	-	-	-	-	82	140	M16	29	82	140	M20	29
	60	-	-	-	-	82	150	M20	29	-	-	-	-
3 002	80	-	-	-	-	82	140	M20	29	82	140	M20	29
	40	-	-	-	-	82	140	M16	29	82	140	M20	29
	60	-	-	-	-	82	150	M20	29	-	-	-	-
	80	-	-	-	-	82	140	M20	29	82	140	M20	29

# Dimensions - DIN-Units

with NAMUR-Yoke



Designation	Actuator Size	252		502		700			1502	3002
		Hub	10, 20 mm	20 mm	40 mm	20 mm	40 mm	60 mm	20, 40, 60, 80 mm	40, 60, 80 mm
$\varnothing A$	mm	265	352	352	405	405	405	548	548	
$\approx H_{max.}$	mm	330	420	460	545	545	600	800	1140	
$\approx H_s_{max.}$	mm	515	705	745	870	870	925	-	-	
$\approx H_L_{max.}$	mm	590	810	870	-	-	-	-	-	
$\varnothing D_s$	mm	330	420	450	350	350	350	500	500	
$\varnothing D_L$	mm	200	300	300	-	-	-	-	-	
$\approx L$	mm	-	-	-	-	-	-	685	685	
$\approx$ Weight	kg	13	28	28	40	40	41	124	240	
$\approx$ Weight with mounted hand wheel "heavy" / "lateral"	kg	19	37	37	58	58	58	174	290	
$\approx$ Weight with top mounted hand wheel "light"	kg	18	35	35	-	-	-	-	-	

Actuator Size	Effective Area (inch <sup>2</sup> )	Stroke (inch)	Spring Ranges (psig)	Yoke Type (see Page 15)	Stem extends by Air failure											
					nec. Air Supply (psig)	max. Force (lbs)	max. Air Supply (psig)	max. Force (lbs)	23	26						
127	19.4	0.4	12 - 23	P	B	26	225	87	1 236		56					
			20 - 35			38	393	87	1 012							
			39 - 59			62	759	87	534							
		0.8	3 - 15			17	56	87	1 405	169	225					
			7 - 28			30	141	87	1 152							
			14 - 35			38	281	87	1 012							
			22 - 39			42	422	87	927							
			22 - 55			58	422	87	618							
			29 - 70			73	562	87	337							
252	38.8	0.4	12 - 23	P	T	26	450	87	2 473		112					
			20 - 35			38	787	87	2 023							
			39 - 59			62	1 517	87	1 068							
		0.8	3 - 15			17	112	87	2 810	337	450					
			7 - 28			30	281	87	2 304							
			15 - 35			38	562	87	2 023							
			22 - 39			42	843	87	1 855							
			22 - 55			58	843	87	1 236							
			29 - 70			73	1 124	87	674							
502	77.5	0.8	3 - 15	P	B	17	225	87	5 620	675	899					
			7 - 28			30	562	87	4 609							
			15 - 35			38	1 124	87	4 047							
			22 - 39			42	1 686	87	3 709							
			22 - 55			58	1 686	87	2 473							
			29 - 70			73	2 248	87	1 349							
		1.6	3 - 15			17	225	87	5 620	674	899					
			7 - 28			30	562	87	4 609							
			15 - 35			38	1 124	87	4 047							
			22 - 39			42	1 686	87	3 709							
			22 - 55			58	1 686	87	2 473							
			29 - 70			73	2 248	87	1 349							
			700			109	0.8	26 - 39	P	T	42	2 834	87	5 193		
								33 - 49			52	3 619	87	4 092		
								44 - 61			64	4 721	87	2 833		
1.6	3 - 15	17		315	87		7 868	944			1 259					
	7 - 28	30		787	87		6 452									
	15 - 35	38		1 574	87		5 665									
	22 - 39	42		2 360	87		5 193									
	22 - 55	58		2 360	87		3 462									
	29 - 70	73		3 147	87		1 888									
2.4	3 - 15	17		315	87		7 868	944			1 259					
	7 - 28	30		787	87		6 452									
	15 - 35	38		1 574	87		5 665									
	22 - 55	58		2 360	87		3 462									
	29 - 70	73		3 147	87		1 888									
	1502	233		0.8	12 - 23		P	B			26	2 698	81	13 489		674
			22 - 30		33	5 058			87	13 151						
			1.6	3 - 15	17	674			73	13 489	2 023	2 698				
				6 - 29	32	1 349			87	13 489						
11 - 20				23	2 529	78			13 489	674	1 349					
22 - 39				42	5 058	87			11 128							
29 - 51				54	6 744	87			8 430							
38 - 61				64	8 768	87			6 070							
2.4			3 - 15	17	674	73			13 489	2 023	2 698					
			6 - 29	39	1 349	87			13 489							
			11 - 20	23	2 529	78			13 489	674	1 349					
			22 - 39	42	5 058	87			11 128							
			29 - 51	54	6 744	87			8 430							
			38 - 61	64	8 768	87			6 070							
3.1			3 - 15	17	674	73			13 489	2 023	2 698					
			6 - 29	32	1 349	87			13 489							
			11 - 20	23	2 529	78			13 489	674	1 349					
			22 - 39	42	5 058	87			11 128							
	29 - 51	54	6 744	87	8 430											
	38 - 61	64	8 768	87	6 070											
3002	465	1.6	3 - 15	P	B	17	1 349	44	13 489	4 047	5 395					
			6 - 29			32	2 698	58	13 489							
			11 - 20			23	5 058	49	13 489	1 349	2 698					
			15 - 35			38	6 744	64	13 489							
			19 - 30			33	8 768	59	13 489							
			29 - 51			54	13 489	80	13 489							
		2.4	3 - 15			17	1 349	44	13 489	4 047	5 395					
			6 - 29			32	2 698	58	13 489							
			11 - 20			23	5 058	49	13 489	1 349	2 698					
			15 - 35			38	6 744	64	13 489							
			19 - 30			33	8 768	59	13 489							
			29 - 51			54	13 489	80	13 489							
		3.1	3 - 15			17	1 349	44	13 489	4 047	5 395					
			6 - 29			32	2 698	58	13 489							
			11 - 20			23	5 058	49	13 489	1 349	2 698					
			15 - 35			38	6 744	64	13 489							
			19 - 30			33	8 768	59	13 489							
			29 - 51			54	13 489	80	13 489							



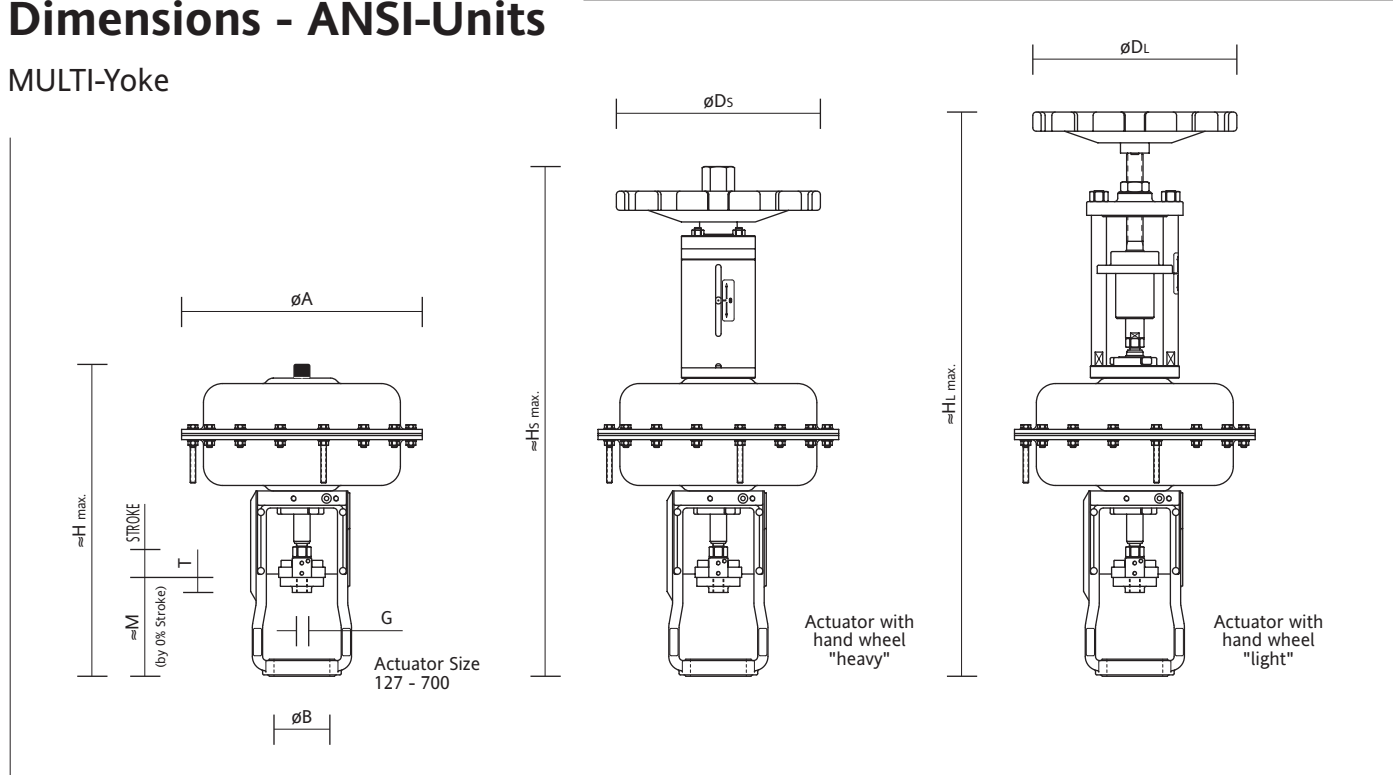
FlowAct™ - High Performance Actuator

Stem retracts by Air failure Actual Air Supply (psig) / Produced Force (lbs)								
29	32	36	41	46	52	58	65	73
112	169	253	337	450	562	674	815	955
281	337	422	506	618	731	843	984	1 124
	84	169	253	365	478	590	731	871
225	337	506	674	899	1 124	1 349	1 630	1 911
562	674	843	1 012	1 236	1 461	1 686	1 967	2 248
56	169	337	506	731	955	1 180	1 461	1 742
1 124	1 349	1 686	2 023	2 473	2 923	3 372	3 934	4 496
112	337	674	1 012	1 461	1 911	2 360	2 923	3 485
1 124	1 349	1 686	2 023	2 473	2 923	3 372	3 934	4 496
112	337	674	1 012	1 461	1 911	2 360	2 923	3 485
1 124	1 349	1 686	2 023	2 473	2 923	3 372	3 934	4 496
112	337	674	1 012	1 461	1 911	2 360	2 923	3 485
1 124	1 349	1 686	2 023	2 473	2 923	3 372	3 934	4 496
112	337	674	1 012	1 461	1 911	2 360	2 923	3 485
1 574	1 888	2 360	2 833	3 462	4 092	4 721	5 508	6 295
157	472	944	1 416	2 046	2 675	3 305	4 092	4 878
1 349	2 023	3 035	4 047	5 395	6 744	8 093	9 779	11 465
	337	1 349	2 360	3 709	5 058	6 407	8 093	9 779
3 372	4 047	5 058	6 070	7 419	8 768	10 116	11 802	13 489
	674	1 686	2 698	4 047	5 395	6 744	8 430	10 116
2 023	2 698	3 709	4 721	6 070	7 419	8 768	10 454	12 140
3 372	4 047	5 058	6 070	7 419	8 768	10 116	11 802	13 489
	674	1 686	2 698	4 047	5 395	6 744	8 430	10 116
2 023	2 698	3 709	4 721	6 070	7 419	8 768	10 454	12 140
3 372	4 047	5 058	6 070	7 419	8 768	10 116	11 802	13 489
	674	1 686	2 698	4 047	5 395	6 744	8 430	10 116
2 023	2 698	3 709	4 721	6 070	7 419	8 768	10 454	12 140
6 744	8 093	10 116	12 140					
	1 349	3 372	5 395	8 093	10 791	13 489		
4 047	5 395	7 419	9 442	12 140				
6 744	8 093	10 116	12 140					
	1 349	3 372	5 395	8 093	10 791	13 489		
4 047	5 395	7 419	9 442	12 140				
6 744	8 093	10 116	12 140					
	1 349	3 372	5 395	8 093	10 791	13 489		
4 047	5 395	7 419	9 442	12 340				

Force in both home positions - for Three Way Valves only - nec. Air (psig)   max. Force (lbs)	
35	141
49	281
61	422
77	422
35	281
49	562
61	843
77	843
35	562
49	1 124
61	1 686
77	1 686
65	2 833
83	3 619
35	787
49	1 574
61	2 360
77	2 360
35	787
49	1 574
77	2 360
35	2 698
52	5 058
35	1 349
32	2 529
61	5 058
80	6 744
35	1 349
32	2 529
61	5 058
80	6 744
35	2 698
32	5 058
49	6 744
49	8 768
80	13 489
35	2 698
32	5 058
49	6 744
49	8 768
80	13 489
35	2 698
32	5 058
49	6 744
49	8 768
80	13 489

# Dimensions - ANSI-Units

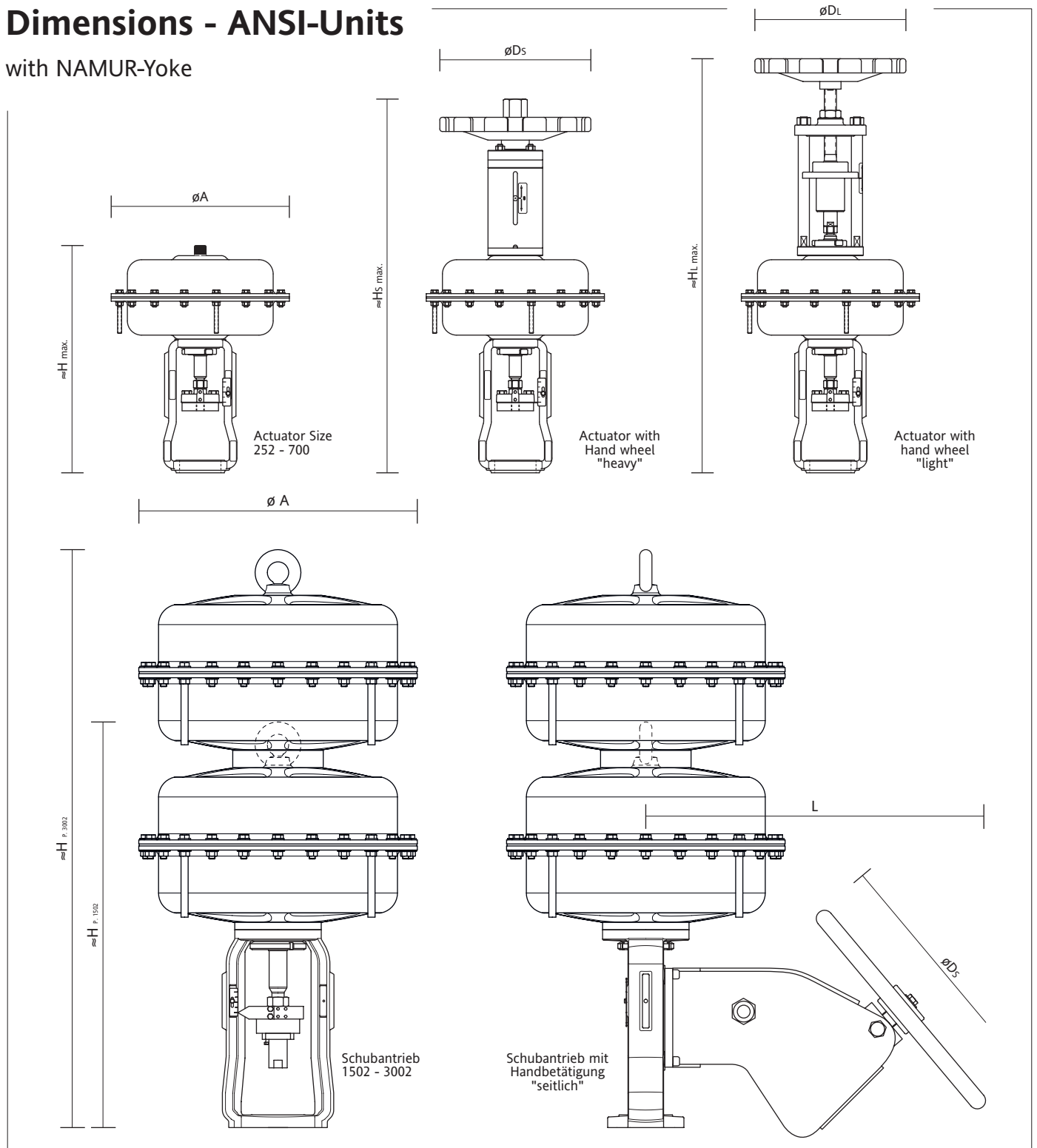
## MULTI-Yoke



Designation	Actuator Size	127		502		700	
		Stroke		0.8 inch	1.6 inch	0.8 inch	1.6 inch
∅ A	inch	7.8	10.4	13.9	13.9	15.9	15.9
≈ H max.	inch	12.6	13.2	17.9	18.1	21.5	21.7
≈ Hs max.	inch	20.3	20.5	29.1	29.3	34.3	34.4
≈ Hl max.	inch	23.2	23.4	33.3	34.3	-	-
∅ Ds	inch	6.3	7.9	9.8	9.8	13.8	13.8
∅ Dl	inch	7.9	7.9	11.8	11.8	-	-
≈ Weight	lb	20	31	64	64	88	88
≈ Weight with top mounted hand wheel "heavy"	lb	33	44	84	84	128	128
≈ Weight with top mounted hand wheel "light"	lb	31	42	79	79	-	-

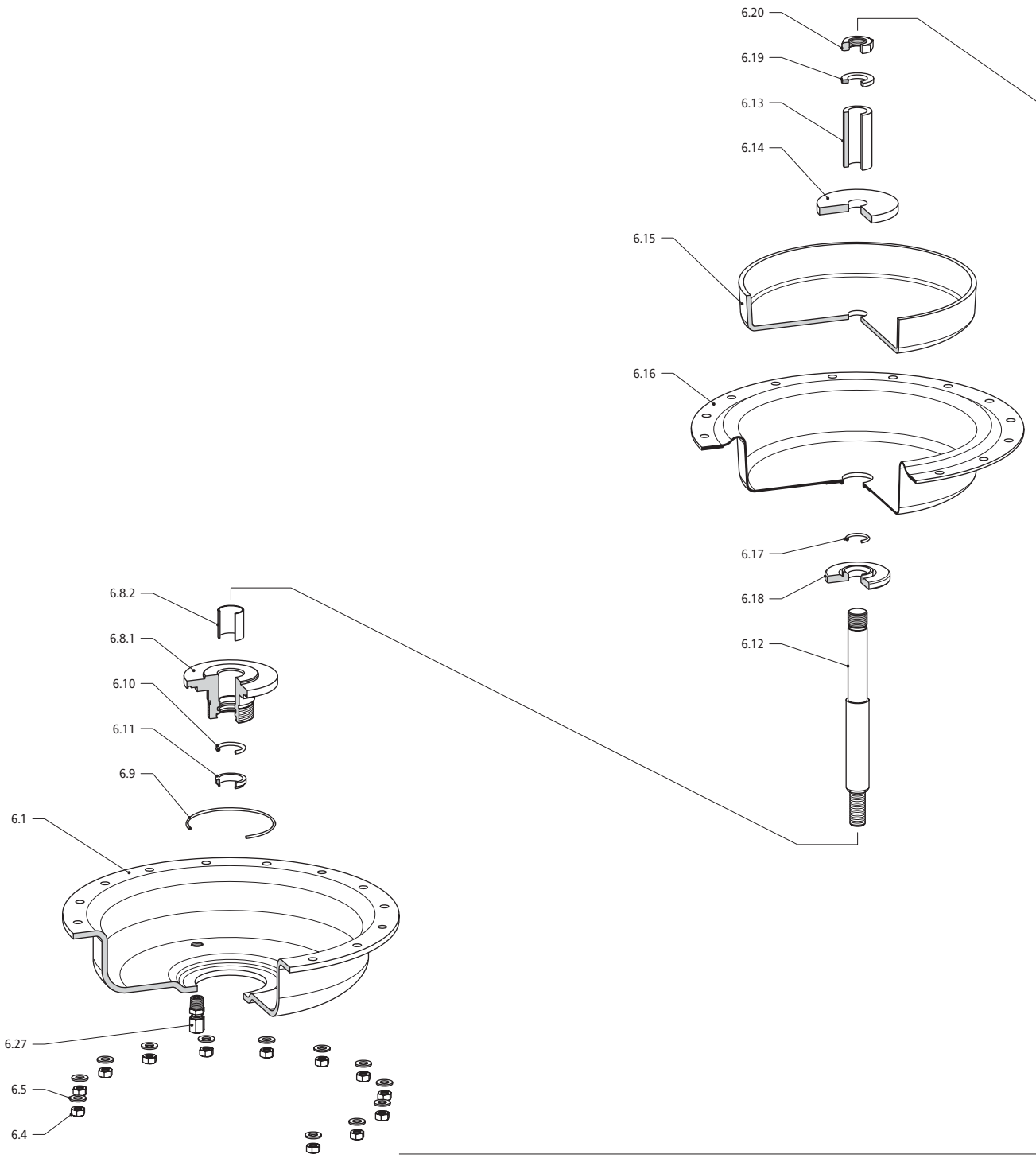
# Dimensions - ANSI-Units

with NAMUR-Yoke

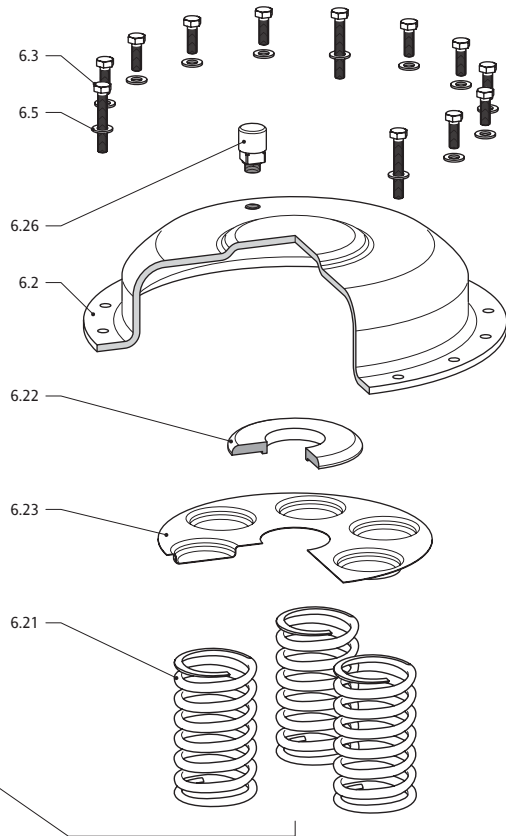


Designation	Actuator Size	252		502		700			1502		3002	
		Stroke	0.4, 0.8 inch	0.8 inch	1.6 inch	0.8 inch	1.6 inch	2.4 inch	0.8, 1.6, 2.4, 3.1 inch	1.6, 2.4, 3.1 inch		
ø A	inch	10.4	13.9	13.9	15.9	15.9	15.9	21.6	21.6			
≈ H max.	inch	13.0	16.5	18.1	21.5	21.5	23.6	31.5	44.9			
≈ Hs max.	inch	20.3	27.8	29.3	34.3	34.3	36.4	-	-			
≈ HL max.	inch	23.2	31.9	34.3	-	-	-	-	-			
ø Ds	inch	13.0	16.5	17.7	13.8	13.8	13.8	19.7	19.7			
ø DL	inch	7.9	11.8	11.8	-	-	-	-	-			
≈ L	inch	-	-	-	-	-	-	27.0	27.0			
≈ Weight	lb	29	62	62	88	88	90	279	540			
≈ Weight with mounted hand wheel "heavy" / "lateral"	lb	42	82	82	128	128	128	390	652			
≈ Weight with top mounted hand wheel "light"	lb	40	77	77	-	-	-	-	-			

# Parts List



FlowAct™ - High Performance Actuator



Designation	Part	Materials	Spare Parts
Diaphragm Casing	6.1	1.0322 <sup>2)</sup>	
Diaphragm Casing	6.2	1.0322 <sup>2)</sup>	
Hexagon Bolt	6.3	A2-70	
Hexagon Nut	6.4	A2-70	
Plain Washer	6.5	A2	
Guide Bush	6.8.1	1.0736 <sup>1)</sup>	
Plain Bearing	6.8.2	-	
O-Ring	6.9	NBR 70	E
O-Ring	6.10	NBR 70	E
Scraper Ring	6.11	NBR 90	E
Stem	6.12	1.4571	
Spacer Bush	6.13	1.0308 <sup>1)</sup>	
Disk	6.14	1.0736 <sup>1)</sup>	
Diaphragm Plate	6.15	1.0332 <sup>1)</sup>	
Diaphragm	6.16	NBR 60	M
O-Ring	6.17	NBR 70	E
Thrust Washer	6.18	1.0736 <sup>1)</sup>	
Lock Washer	6.19	Federstahl	
Hexagon Nut	6.20	17H <sup>1)</sup>	
Actuator Spring	6.21	1.7102	
Distance Plate <sup>3)</sup>	6.22	1.0736 <sup>1)</sup>	
Spring Adjusting Plate	6.23	1.0330.03 <sup>1)</sup>	
Vent Plug	6.26	Polyamid	
Fitting	6.27	-	
Yoke	-	0.7043	

<sup>1)</sup> chromatised acc. to DIN 50 961 Fe/Zn 12C

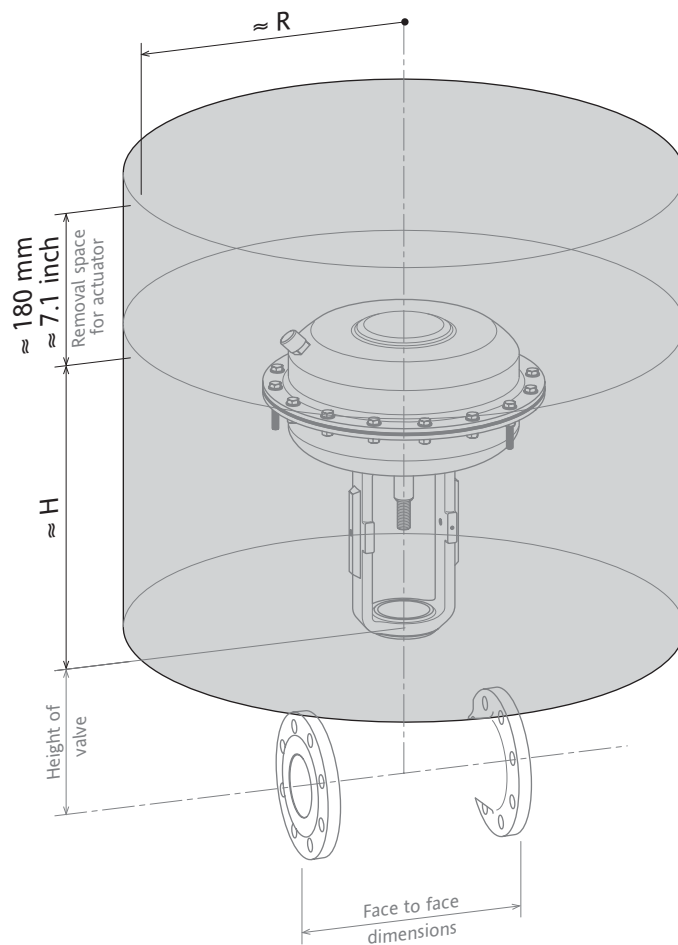
<sup>2)</sup> powder coating

<sup>3)</sup> only for "stem extends by air failure"

M Diaphragm

E Gasket set

# Minimum Clearance Zone



Actuator Size		≈ R				≈ H max.	
		without accessories	accessories direct mounted	accessories NAMUR-mounted	with lateral mounted hand wheel	without hand wheel	with top mounted hand wheel
127	mm	100	195	260		320	590
252	mm	135	195	290		335	595
502	mm	180	195	330		460	870
700	mm	205	205	345		600	925
1 502	mm	275		415	685	800	
3 002	mm	275		415	685	1140	
127	inch	3.9	7.7	10.2		12.6	23.2
252	inch	5.3	7.7	11.4		13.2	23.4
502	inch	7.1	7.7	13.0		18.1	34.3
700	inch	8.1	8.1	13.6		23.6	36.4
1 502	inch	10.8		16.3	27.0	31.5	
3 002	inch	10.8		16.3	27.0	44.9	

For face to face dimensions and height of valve see PSS-valve

# SPM - Code

	DN	PN	Body/Cert.	Plug	Seat	kvs	Trim	Actuator	S
								IT 502 AVILZB	

Model-code of the valve

Actuator Design for internal air supply ( 127 - 700 )		
Standard-Actuator	I .	
DVGW-Actuator	D.	
without MULTI-Yoke	.O	
for FlowPak	.P	
for FlowTop <small>DIN and ANSI</small>	.T	
Actuator Design for external air supply		
Standard-Actuator	P .	
DVGW-Actuator	C.	
without NAMUR-Yoke	.O	
for FlowTop <small>DIN and ANSI</small>	.B	
for FlowPro, VariCool	.D	
Actuator Size		
125 cm <sup>2</sup>	..	127
250 cm <sup>2</sup>	..	252
500 cm <sup>2</sup>	..	502
700 cm <sup>2</sup>	..	700
1500 cm <sup>2</sup>	..	1502
3000 cm <sup>2</sup>	..	3002

Actuator Color	
Blue	A
White	B
Yellow	C

Spring Range ( not adjustable )		
0,2 - 1,0	( 3 - 15 )	AD
0,4 - 2,0	( 6 - 29 )	GF
0,5 - 1,9	( 7 - 28 )	BL
0,75 - 1,4	( 11 - 20 )	KI
0,8 - 1,4	( 12 - 20 )	MU
1,0 - 2,4	( 15 - 35 )	DY
1,3 - 2,1	( 19 - 30 )	EP
1,4 - 2,4	( 20 - 35 )	IY
1,5 - 2,1	( 22 - 30 )	VP
1,5 - 2,7	( 22 - 39 )	VC
1,5 - 3,8	( 22 - 55 )	VI
1,8 - 2,7	( 26 - 39 )	JC
2,0 - 3,5	( 29 - 51 )	FS
2,0 - 4,8	( 29 - 70 )	FY
2,3 - 3,4	( 33 - 49 )	TD
2,6 - 4,2	( 38 - 61 )	AJ
2,7 - 4,1	( 39 - 59 )	CW
3,0 - 4,2	( 44 - 61 )	RJ

Stroke	
Code in combination with the valve not necessary !	
10 mm	M
20 mm	A
40 mm	B
60 mm	C
80 mm	D

Operation*) air failure	
Stem retracted	A
Stem extended	Z

Hand Wheel	
without Hand Wheel	O
with top mounted Hand Wheel "light" 127 - 502	L
with top mounted Hand Wheel "heavy" 127 - 700	H
with lateral Hand Wheel 1502 - 3002	S

\* Definition according to VDI/VDE 3844 - Draft is only possible in conjunction with the control valve.

The codes listed below must be noted when ordering spare parts.

Actuator ( complete )	A
Diaphragm	M
Seals	E

When ordering an actuator without the valve, details of stroke, connection thread and required yoke are needed together with the code lettering information.



## Control Valve Plant Austria

### Schmidt Armaturen

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SAENBRFACT-00 12.06

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<sup>TM</sup> indicates a trade mark of Schmidt Armaturen.

Information given in this product specification sheet is made in good faith and based upon specific testing but does not, however, constitute a guarantee.

Modifications without notice in line with technical progress.

PSS 108298 12/06 FlowAct en