

Quarter turn actuators DAPS

FESTO



Quarter turn actuators DAPS

Key features

FESTO

General DAPS

→ Page 11

- | - Size
0008 ... 8000

- ⊥ - Torque
8 ... 8,000 Nm

- ↷ - Swivel angle
0 ... 90°

The quarter turn actuators DAPS are specially tailored to the requirements of the process industry. The torque is generated via a scotch yoke mechanism, which helps to overcome the valve's high breakaway torques.

Given their robustness and graduated torques, the quarter turn actuators DAPS are predominantly used to control valves through which various media flow and whose angle of rotation is limited to 90°, e.g. ball valves and butterfly valves.

- Compact design
- Torque characteristics adapted to the process valves
- For the same housing size, the single-acting drive has half the torque of the double-acting drive
- Low wearing thanks to the simple and robust mechanical system
- Adjustable swivel angle
- Selected types in accordance with ATEX directive for potentially explosive atmospheres
→ www.festo.com/en/ex

- Port pattern to NAMUR VDI/VDE 3845 for attaching solenoid valves



Variant with handwheel DAPS MW

→ Page 52

- | - Size
0106 ... 1920

- ⊥ - Torque
106 ... 1920 Nm

- ↷ - Swivel angle
0 ... 90°

The position of the process valve or actuator can be manually adjusted using the handwheel when the supply pressure is switched off. The handwheel therefore acts as a manual emergency override.

- Low wearing thanks to the simple and robust mechanical system
- Torque characteristics adapted to the process valves
- Selected types in accordance with ATEX directive for potentially explosive atmospheres
→ www.festo.com/en/ex

- Port pattern to NAMUR VDI/VDE 3845 for attaching solenoid valves



Stainless steel variant DAPS CR

→ Page 39

- | - Size
0015 ... 0480

- ⊥ - Torque
15 ... 480 Nm

- ↷ - Swivel angle
0 ... 90°

Single-acting and double-acting quarter turn actuators DAPS in stainless steel are used for automating fittings with a 90° swivel angle. The single-acting variant comes in different spring strengths for different supply pressures.

- Low wearing thanks to the simple and robust mechanical system
- Torque characteristics adapted to the process valves
- Selected types in accordance with ATEX directive for potentially explosive atmospheres
→ www.festo.com/en/ex

- Port pattern to NAMUR VDI/VDE 3845 for attaching solenoid valves



Quarter turn actuators DAPS, double-acting

Product range overview



Flange hole pattern – Connection dimensions to DIN ISO 5211 and NAMUR VDI/VDE 3845										
Connection	F03	F03	F04	F04	F05	F05	F05	F07	F07	Shaft height
Square	V11	V11	V11	V14	V11	V14	V17	V14	V17	
DAPS-0008-...-F03	■	-	-	-	-	-	-	-	-	20
DAPS-0015-...-F03	-	■	-	-	-	-	-	-	-	20
DAPS-0015-...-F04	-	-	■	-	-	-	-	-	-	20
DAPS-0030-...-F0305	-	■	-	-	■	-	-	-	-	20
DAPS-0030-...-F04	-	-	■	-	-	-	-	-	-	20
DAPS-0060-...-F04	-	-	-	■	-	-	-	-	-	20
DAPS-0060-...-F0507	-	-	-	-	-	■	-	■	-	20
DAPS-0106-...-F0507	-	-	-	-	-	-	■	-	■	20
Hole pattern for NAMUR accessories	30	30	30	30	30	30	30	30	30	
	30	80	80	80	80	80	80	80	80	

Flange hole pattern – Connection dimensions to DIN ISO 5211 and NAMUR VDI/VDE 3845												
Connection	F07	F10	F10	F12	F12	F12	F14	F14	F16	F16	F25	Shaft height
Square	V22	V22	V27	V27	V36	V46	V36	V46	V46	V46	V55	
DAPS-0180-...-F0710	■	■	-	-	-	-	-	-	-	-	-	30
DAPS-0240-...-F0710	■	■	-	-	-	-	-	-	-	-	-	30
DAPS-0360-...-F0710	■	■	-	-	-	-	-	-	-	-	-	30
DAPS-0480-...-F1012	-	-	■	■	-	-	-	-	-	-	-	30
DAPS-0720-...-F1012	-	-	■	■	-	-	-	-	-	-	-	30
DAPS-0960-...-F12	-	-	-	-	■	-	-	-	-	-	-	30
DAPS-0960-...-F14	-	-	-	-	-	-	■	-	-	-	-	30
DAPS-1440-...-F12	-	-	-	-	■	-	-	-	-	-	-	30
DAPS-1440-...-F14	-	-	-	-	-	-	■	-	-	-	-	30
DAPS-1920-...-F14	-	-	-	-	-	-	-	■	-	-	-	30
DAPS-1920-...-F1216	-	-	-	-	-	■	-	-	■	-	-	30
DAPS-2880-...-F16	-	-	-	-	-	-	-	-	-	■	-	30
DAPS-3840-...-F16	-	-	-	-	-	-	-	-	-	■	-	30
DAPS-5760-...-F25	-	-	-	-	-	-	-	-	-	-	■	30
DAPS-8000-...-R-F25	-	-	-	-	-	-	-	-	-	-	■	30
Hole pattern for NAMUR accessories	30	30	30	30	30	30	30	30	30	30	30	
	80	80	80	80	80	80	80	80	80	130	130	

Quarter turn actuators DAPS, single-acting

Product range overview



Flange hole pattern – Connection dimensions to DIN ISO 5211 and NAMUR VDI/VDE 3845									
Connection	F03	F04	F04	F05	F05	F05	F07	F07	Shaft height
Square	V11	V11	V14	V11	V14	V17	V14	V17	
DAPS-0015-...-F0305	■	-	-	■	-	-	-	-	20
DAPS-0015-...-F04	-	■	-	-	-	-	-	-	20
DAPS-0030-...-F04	-	-	■	-	-	-	-	-	20
DAPS-0030-...-F0507	-	-	-	-	■	-	■	-	20
DAPS-0053-...-F0507	-	-	-	-	-	■	-	■	20
Hole pattern for NAMUR accessories	30	30	30	30	30	30	30	30	
	80	80	80	80	80	80	80	80	

Flange hole pattern – Connection dimensions to DIN ISO 5211 and NAMUR VDI/VDE 3845											
Connection	F07	F10	F10	F12	F12	F12	F14	F14	F16	F16	Shaft height
Square	V22	V22	V27	V27	V36	V46	V36	V46	V46	V46	
DAPS-0090-...-F0710	■	■	-	-	-	-	-	-	-	-	30
DAPS-0120-...-F0710	■	■	-	-	-	-	-	-	-	-	30
DAPS-0180-...-F0710	■	■	-	-	-	-	-	-	-	-	30
DAPS-0240-...-F1012	-	-	■	■	-	-	-	-	-	-	30
DAPS-0360-...-F1012	-	-	■	■	-	-	-	-	-	-	30
DAPS-0480-...-F12	-	-	-	-	■	-	-	-	-	-	30
DAPS-0480-...-F14	-	-	-	-	-	-	■	-	-	-	30
DAPS-0720-...-F12	-	-	-	-	■	-	-	-	-	-	30
DAPS-0720-...-F14	-	-	-	-	-	-	■	-	-	-	30
DAPS-0960-...-F14	-	-	-	-	-	-	-	■	-	-	30
DAPS-0960-...-F1216	-	-	-	-	-	■	-	-	■	-	30
DAPS-1440-...-F16	-	-	-	-	-	-	-	-	-	■	30
DAPS-1920-...-F16	-	-	-	-	-	-	-	-	-	■	30
DAPS-2880-...-F16	-	-	-	-	-	-	-	-	-	■	30
DAPS-4000-...-RS1-F25	-	-	-	-	-	-	-	-	-	■	30
DAPS-4000-...-RS2-F25	-	-	-	-	-	-	-	-	-	■	30
DAPS-4000-...-RS3-F25	-	-	-	-	-	-	-	-	-	■	30
DAPS-4000-...-RS4-F25	-	-	-	-	-	-	-	-	-	■	30
Hole pattern for NAMUR accessories	30	30	30	30	30	30	30	30	30	30	
	80	80	80	80	80	80	80	80	80	130	

Quarter turn actuators DAPS CR

Product range overview

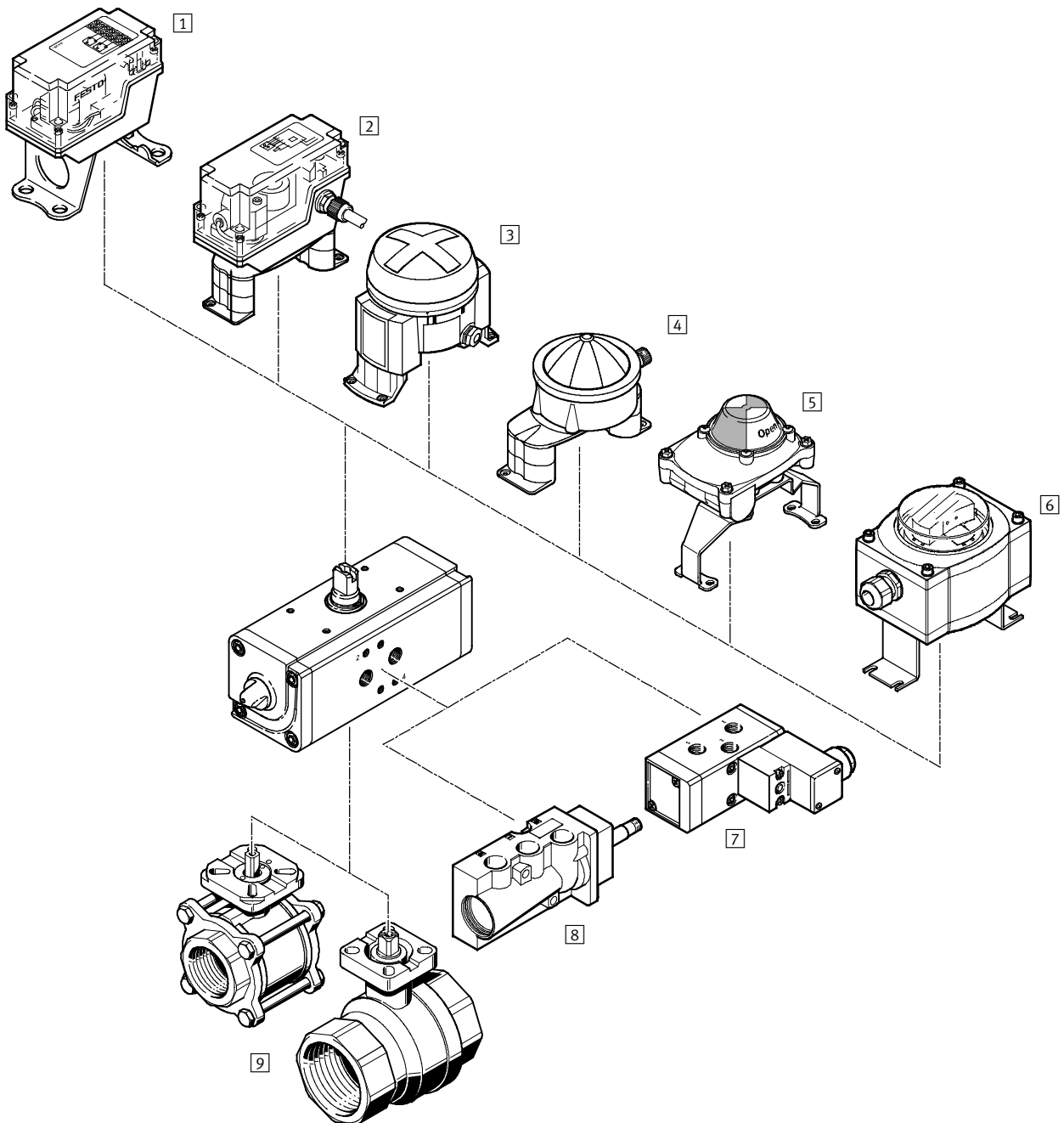
DAPS CR, double-acting											
Flange hole pattern – Connection dimensions to DIN ISO 5211 and NAMUR VDI/VDE 3845											
Connection	F03	F03	F05	F05	F05	F07	F07	F07	F10	F10	Shaft height
Square	V09	V11	V11	V14	V17	V14	V17	V22	V17	V22	
DAPS-0015-...-R-F03-CR	■	-	-	-	-	-	-	-	-	-	20 mm
DAPS-0030-...-R-F03-CR	■	-	-	-	-	-	-	-	-	-	20 mm
DAPS-0060-...-R-F0305-CR	-	■	■	-	-	-	-	-	-	-	20 mm
DAPS-0120-...-R-F0507-CR	-	-	-	■	-	■	-	-	-	-	30 mm
DAPS-0240-...-R-F0507-CR	-	-	-	-	■	-	■	-	-	-	30 mm
DAPS-0480-...-R-F0710-CR	-	-	-	-	-	-	-	■	-	■	30 mm
Hole pattern for NAMUR accessories	25	25	25	30	30	30	30	30	30	30	
	50	50	50	80	80	80	80	80	80	80	

DAPS CR, single-acting											
Flange hole pattern – Connection dimensions to DIN ISO 5211 and NAMUR VDI/VDE 3845											
Connection	F03	F03	F05	F05	F05	F07	F07	F07	F10	F10	Shaft height
Square	V09	V11	V11	V14	V17	V14	V17	V22	V17	V22	
DAPS-0015-...-RS1-F03-CR	■	-	-	-	-	-	-	-	-	-	20 mm
DAPS-0015-...-RS2-F03-CR	■	-	-	-	-	-	-	-	-	-	20 mm
DAPS-0015-...-RS3-F03-CR	■	-	-	-	-	-	-	-	-	-	20 mm
DAPS-0015-...-RS4-F03-CR	■	-	-	-	-	-	-	-	-	-	20 mm
DAPS-0030-...-RS1-F03-CR	-	■	■	-	-	-	-	-	-	-	20 mm
DAPS-0030-...-RS2-F03-CR	-	■	■	-	-	-	-	-	-	-	20 mm
DAPS-0030-...-RS3-F03-CR	-	■	■	-	-	-	-	-	-	-	20 mm
DAPS-0030-...-RS4-F03-CR	-	■	■	-	-	-	-	-	-	-	20 mm
DAPS-0060-...-RS1-F0305-CR	-	-	-	■	-	■	-	-	-	-	30 mm
DAPS-0060-...-RS2-F0305-CR	-	-	-	■	-	■	-	-	-	-	30 mm
DAPS-0060-...-RS3-F0305-CR	-	-	-	■	-	■	-	-	-	-	30 mm
DAPS-0060-...-RS4-F0305-CR	-	-	-	■	-	■	-	-	-	-	30 mm
DAPS-0120-...-RS1-F0507-CR	-	-	-	-	■	-	■	-	-	-	30 mm
DAPS-0120-...-RS2-F0507-CR	-	-	-	-	■	-	■	-	-	-	30 mm
DAPS-0120-...-RS3-F0507-CR	-	-	-	-	■	-	■	-	-	-	30 mm
DAPS-0120-...-RS4-F0507-CR	-	-	-	-	■	-	■	-	-	-	30 mm
DAPS-0240-...-RS1-F0507-CR	-	-	-	-	-	-	-	■	-	■	30 mm
DAPS-0240-...-RS1-F0507-CR	-	-	-	-	-	-	-	■	-	■	30 mm
DAPS-0240-...-RS1-F0507-CR	-	-	-	-	-	-	-	■	-	■	30 mm
DAPS-0240-...-RS1-F0507-CR	-	-	-	-	-	-	-	■	-	■	30 mm
Hole pattern for NAMUR accessories	25	25	25	30	30	30	30	30	30	30	
	50	50	50	80	80	80	80	80	80	80	

Quarter turn actuators DAPS

Peripherals overview

FESTO



Quarter turn actuators DAPS

Peripherals overview

Mounting attachments and accessories		
	Brief description	→ Page/Internet
1	Limit switch attachment QH-DR-E	Square design, pneumatic, electrical or inductive sensing qh-dr-e
2	Limit switch attachment DAPZ	Square design Electrical, electrical and explosion-proof or inductive sensing dapz
3	Limit switch attachment DAPZ	Round design, variant AR Electrical, inductive or inductive and explosion-proof sensing dapz
4	Limit switch attachment DAPZ	Round design, variant RO Electrical, inductive or inductive NAMUR sensing dapz
5	Limit switch attachment SRBF	Square design, sensing via two mechanical switches srbf
6	Sensor box SRBP, SRAP	SRBP, binary sensor box reports the open and closed position of the drive SRAP, analogue sensor box continuously senses the entire swivel range and reports this back to the controller srbp, srap
7	Solenoid valve MFH ¹⁾	Basic valve with pilot control valve for F solenoid coil mfh
	Solenoid valve MN1H ¹⁾	Basic valve with pilot control valve for N1 solenoid coil mn1h
	Solenoid valve MGTBH ¹⁾	Basic valve with pilot control valve, solenoid coil and socket mgtbh
8	Solenoid valve NVF3 ¹⁾	For F solenoid coil and explosion-proof F solenoid coil nvf3
9	Ball valve VAPB	Brass or stainless steel, corrosion-resistant vapb

1) Direct mounting of solenoid valves only possible from size 0015 onwards

Quarter turn actuators DAPS

Type codes

FESTO

DAPS – 0240 – 090 – R S 4 – F10 –

Type	
DAPS	Quarter turn actuator
Size	
0008	Nominal torque 8 Nm
0015	Nominal torque 15 Nm
0030	Nominal torque 30 Nm
0053	Nominal torque 53 Nm
0060	Nominal torque 60 Nm
0090	Nominal torque 90 Nm
0106	Nominal torque 106 Nm
0120	Nominal torque 120 Nm
0180	Nominal torque 180 Nm
0240	Nominal torque 240 Nm
0360	Nominal torque 360 Nm
0480	Nominal torque 480 Nm
0720	Nominal torque 720 Nm
0960	Nominal torque 960 Nm
1440	Nominal torque 1,440 Nm
1920	Nominal torque 1,920 Nm
2880	Nominal torque 2,880 Nm
3840	Nominal torque 3,840 Nm
4000	Nominal torque 4,000 Nm
5760	Nominal torque 5,760 Nm
8000	Nominal torque 8,000 Nm
Swivel angle	
090	90°
Closing direction	
R	Closes to right
Mode of operation	
	Double-acting
S	Single-acting
Spring strength	
–	Not applicable for double-acting
1	For connection pressure 2.8 bar
2	For connection pressure 3.5 bar
3	For connection pressure 4.2 bar
4	For connection pressure 5.6 bar
1st flange hole pattern	
F03	Flange hole pattern F03
F04	Flange hole pattern F04
F05	Flange hole pattern F05
F07	Flange hole pattern F07
F10	Flange hole pattern F10
F12	Flange hole pattern F12
F14	Flange hole pattern F14
F16	Flange hole pattern F16
F25	Flange hole pattern F25

Quarter turn actuators DAPS

Type codes

FESTO

		12	-		-	
2nd flange hole pattern						
05	Flange hole pattern F05					
07	Flange hole pattern F07					
10	Flange hole pattern F10					
12	Flange hole pattern F12					
16	Flange hole pattern F16					
Manual override						
MW	With handwheel					
Temperature range						
-	Standard (-20 °C ... +80 °C)					
T6	-50 °C ... +60 °C					

Quarter turn actuators DAPS CR

Type codes

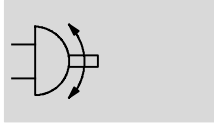
		DAPS	-	0015	-	090	-	R	S	4	-	F03	-	05	-	CR	
Type																	
DAPS	Quarter turn actuator for process automation																
Nominal torque in Nm																	
0015	15 Nm																
0030	30 Nm																
0060	60 Nm																
0120	120 Nm																
0240	240 Nm																
0480	480 Nm																
Swivel angle in degrees																	
90	90°																
Closing direction																	
R	Closes to right																
Mode of operation																	
S	Single-acting																
Spring strength																	
1	Spring strength for connection pressure 2.8 bar																
2	Spring strength for connection pressure 3.5 bar																
3	Spring strength for connection pressure 4.2 bar																
4	Spring strength for connection pressure 5.6 bar																
1st flange hole pattern																	
F03	Flange hole pattern 03																
F05	Flange hole pattern 05																
F07	Flange hole pattern 07																
2nd flange hole pattern																	
05	Flange hole pattern 05																
07	Flange hole pattern 07																
10	Flange hole pattern 10																
Special design																	
CR	Stainless steel																

Quarter turn actuators DAPS, double-acting

Technical data

FESTO

Function




Swivel angle
0 ... 90°

Wearing parts kits
→ 22



 Size
0008 ... 8000

 Torque
8 ... 8,000 Nm

General technical data					
Size	0008	0015 ... 0360	0480 ... 1920	2880 ... 5760	8000
Pneumatic connection	G1/8	G1/8	G1/4	G3/8	G3/8
Design	Scotch yoke system				
Mode of operation	Double-acting				
Mounting position	Any				
Position sensing	None				
Cushioning	No cushioning				
Swivel angle [°]	90				
End-position adjusting range at 0° [°]	–	–	–	±5	±5
End-position adjusting range at 90° [°]	–	±2	±2	±5	±5
Closing direction	Closes to right				

Operating and environmental conditions					
Size	0008	0015 ... 0360	0480 ... 1920	2880 ... 5760	8000
Operating pressure [bar]	1 ... 8.4				1 ... 7
Nominal operating pressure [bar]	5.6				
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]				
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)				
Ambient temperature [°C]	–20 ... +80				
Ambient temperature for variant T6 [°C]	–	–50 ... +60			–
Corrosion resistance class CRC ¹⁾	3				
Connection to process valve as per standard	ISO 5211				
Valve connection as per standard	VDI/VDE 3845 (NAMUR)				

1) Corrosion resistance class 3 according to Festo standard 940 070

Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.

ATEX	
ATEX category for gas	II 2G
Explosion ignition protection type for gas	c TX X
ATEX category for dust	II 2D
Explosion ignition protection type for dust	c TX X
Explosion-proof temperature rating	–20 °C ≤ Ta ≤ +60 °C
Explosion-proof temperature rating T6	–50 °C ≤ Ta ≤ +60 °C
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

Quarter turn actuators DAPS, double-acting

Technical data

FESTO

Air consumption [l/cycle] at 6 bar		Size	
Size		Size	
DAPS-0008	0.4	DAPS-0720	24.5
DAPS-0015	0.72	DAPS-0960	48
DAPS-0030	1.44	DAPS-1440	53.2
DAPS-0060	3	DAPS-1920	96
DAPS-0106	5.04	DAPS-2880	140
DAPS-0180	8.64	DAPS-3840	170.1
DAPS-0240	12	DAPS-5760	266
DAPS-0360	17.4	DAPS-8000	300
DAPS-0480	24		

Weight [g]		Size	
Size		Size	
DAPS-0008	300	DAPS-0720	12,000
DAPS-0015	750	DAPS-0960	17,400
DAPS-0030	1,000	DAPS-1440	23,000
DAPS-0060	1,600	DAPS-1920	32,000
DAPS-0106	2,500	DAPS-2880	56,000
DAPS-0180	4,600	DAPS-3840	49,000
DAPS-0240	5,400	DAPS-5760	86,000
DAPS-0360	6,500	DAPS-8000	106,000
DAPS-0480	9,600		

Materials		
Quarter turn actuators		Material number
Housing	Wrought aluminium alloy	–
Cover	Wrought aluminium alloy	–
Shaft	High-alloy steel	1.4305
External screws	High-alloy steel	–
Seals	FPM, NBR, PUR	–
	T6 FVMQ, PTFE-reinforced	–
Note on materials	Conforms to RoHS	–
	T6 Contains PWIS (paint-wetting impairment substances), conforms to RoHS	–

Quarter turn actuators DAPS, double-acting

Technical data

FESTO

Actual torque [Nm] as a function of operating pressure [bar] and swivel angle [°]									
Size	Swivel angle [°]	Operating pressure [bar]							
		2.5	3	4	5	5.6	6	7	8
DAPS-0008	0	3.1	3.8	5	6.3	7	7.5	8.8	10
	50	1.6	1.9	2.5	3.1	3.5	3.8	4.4	5
	90	3.1	3.8	5	6.3	7	7.5	8.8	10
DAPS-0015	0	6.7	8	10.7	13.4	15	16.1	18.8	21.4
	50	3.3	4	5.4	6.7	7.5	8	9.4	10.7
	90	5	6	8.1	10.1	11.3	12.1	14.1	16.1
DAPS-0030	0	13.4	16.1	21.4	26.8	30	32.1	37.5	42.9
	50	6.7	8	10.7	13.4	15	16.1	18.8	21.4
	90	10	12	16.1	20.1	22.5	24.1	28.1	32.1
DAPS-0060	0	26.8	32.1	42.9	53.6	60	64.3	75	85.7
	50	13.4	16.1	21.4	26.8	30	32.1	37.5	42.9
	90	20.1	24.1	32.1	40.2	45	48.2	56.3	64.3
DAPS-0106	0	47.5	57	76	95	106	114	133	151
	50	23.5	28	38	47	53	57	66	76
	90	35.5	43	57	71	80	86	100	114
DAPS-0180	0	80.4	96	128.4	160.8	180	193.2	225.6	264.8
	50	40.2	48	64.8	80.4	90	96	112.8	128.4
	90	60.6	72	97.2	121.2	135	145.2	169.2	193.2
DAPS-0240	0	107.1	128.6	171.4	214.3	240	257.1	300	342.9
	50	53.5	64.3	85.7	107.1	120	128.6	150	171.4
	90	80.3	96.4	128.6	160.7	180	192.9	225	257.1
DAPS-0360	0	160.8	192	256.8	321.6	360	386.4	451.2	513.6
	50	80.4	96	129.6	160.8	180	192	225.6	264.8
	90	121.2	144	194.4	242.4	270	290.4	338.4	386.4
DAPS-0480	0	214.3	257.1	342.9	428.6	480	514.3	600	685.7
	50	107.1	128.6	171.4	214.3	240	257.1	300	342.9
	90	160.7	192.9	257.1	321.4	360	358.7	450	514.3
DAPS-0720	0	321.4	384	513.6	643.2	720	772.8	902.4	1,027.2
	50	160.7	192	259.2	321.6	360	384	451.2	529.6
	90	241	288.1	388.8	484.8	540	580.8	676.8	772.8
DAPS-0960	0	428.6	514.3	685.7	857.1	960	1,028.6	1,200	1,371.4
	50	214.3	257.1	342.9	428.6	480	514.3	600	685.7
	90	321.4	385.7	514.3	642.9	720	771.4	900	1,028.6
DAPS-1440	0	642.8	768	1,027.2	1,286.4	1,440	1,545.6	1,804.8	2,057.4
	50	321.4	384	518.4	643.2	720	768	902.4	1,059.2
	90	482.1	576	777.6	969.9	1,080	1,161.6	1,353.6	1,545.6
DAPS-1920	0	857.1	1,028.6	1,371.4	1,714.3	1,920	2,057.1	2,400	2,742.9
	50	428.6	514.3	685.8	857.1	960	1,028.6	1,200	1,371.4
	90	642.9	771.4	1,028.6	1,285.7	1,440	1,542.9	1,800	2,057.1
DAPS-2880	0	1,285	1,542	2,057	2,571	2,880	3,085	3,600	4,114
	50	642	771	1,028	1,285	1,440	1,542	1,800	2,057
	90	856	1,028	1,371	1,741	1,920	2,056	2,400	2,742
DAPS-3840	0	1,714	2,057	2,743	3,428	3,840	4,114	4,800	5,485
	50	857	1,028	1,371	1,714	1,920	2,057	2,400	2,742
	90	1,285	1,543	2,057	2,571	2,880	3,085	3,600	4,114
DAPS-5760	0	2,571	3,085	4,114	5,142	5,760	6,171	7,200	8,228
	50	1,285	1,542	2,057	2,571	2,880	3,085	3,600	4,141
	90	1,928	2,313	3,085	3,856	4,320	4,628	5,400	6,171
DAPS-8000	0	3,571.4	4,285.7	5,714.3	7,142.9	8,000	8,571.4	10,000	–
	50	1,785.7	2,142.9	2,857.1	3,571.4	4,000	4,285.7	5,000	–
	90	2,678.6	3,214.3	4,285.7	5,357.1	6,000	6,428.6	7,500	–

Torque for size at 5.6 bar and swivel angle 0°

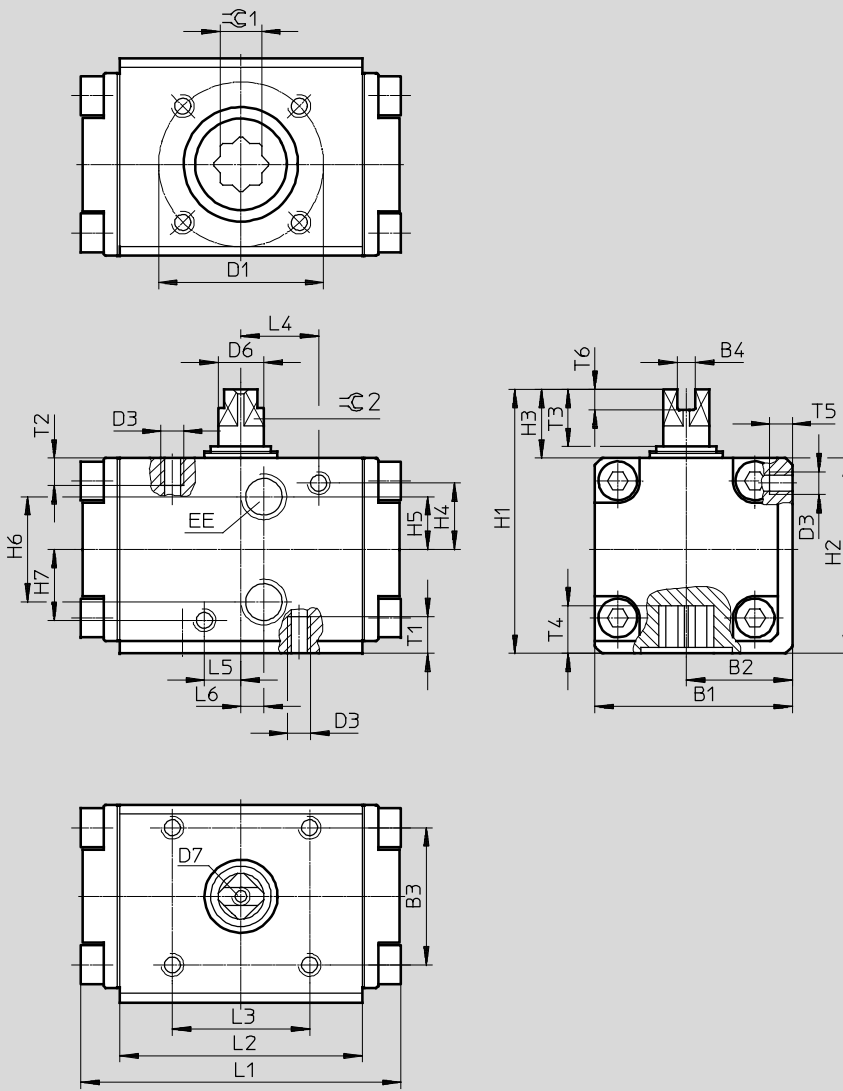
Quarter turn actuators DAPS, double-acting

Technical data

Dimensions

Size 0008

Download CAD data → www.festo.com



Quarter turn actuators DAPS, double-acting

Technical data

FESTO

Size	B1	B2	B3	B4 +0.1	D1 ∅	D3	D6 ∅	D7	EE	H1	H2	H3	H4	H5	H6
DAPS-008-...	43.2	23.2	30	4	36	M5	10	M6	G $\frac{1}{8}$	57.7	42.7	15	14.5	11.5	23

Size	H7	L1	L2	L3	L4	L5	L6	T1	T2	T3	T4	T5	T6 +0.5	⌀ 1 H11	⌀ 2 h11
DAPS-008-...	15.5	70	53	30	17	8	5	8	6	12.4	10.1	5	4.5	9	8

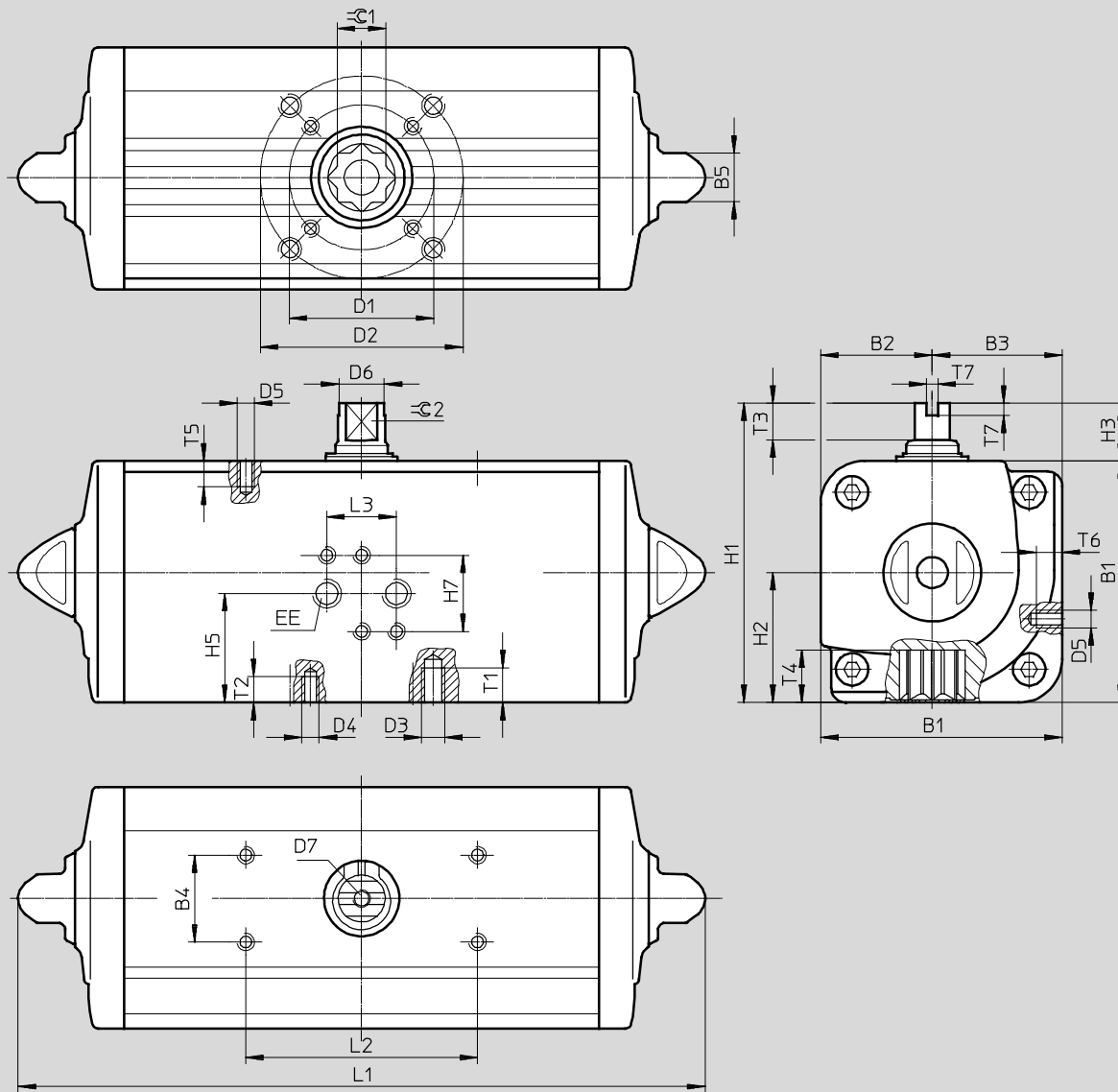
Quarter turn actuators DAPS, double-acting

Technical data

Dimensions

Size 0015 ... 1920

Download CAD data → www.festo.com



Quarter turn actuators DAPS, double-acting

Technical data

FESTO

Size	B1	B2	B3	B4	B5	D1 ∅ ±0.1	D2 ∅ ±0.1	D3	D4	D5	D6 ∅	D7	EE	H1	H2		
DAPS-0015-...-F03	52.2	24.2	28	30	13	36	-	-	M5	M5	9.2	M6	G $\frac{1}{8}$	72.2	28		
DAPS-0015-...-F04						42	-	-	M5								
DAPS-0030-...-F0305	59.2	27.7	31.5		13	36	50	M6	M5		10.9			14.5	16.2	103.3	44.8
DAPS-0030-...-F04						42	-	-	M5								
DAPS-0060-...-F04	70.4	32.7	37.7		13	42	-	-	M5		20.2			22.5	25.5	141.1	60.1
DAPS-0060-...-F0507						50	70	M8	M6								
DAPS-0106-...-F0507	83.3	38.5	44.8		17	50	70	M8	M6		16.2			103.3	44.8		
DAPS-0180-...-F0710	107.5	51	56.5		22	70	102	M10	M8		20.2			137.5	56.5		
DAPS-0240-...-F0710	111.1	51	60.1		22	70	102	M10	M8		22.5			141.1	60.1		
DAPS-0360-...-F0710	118	56	62		22	70	102	M10	M8		25.5			148	62		

Size	H3	H5	H7	L1 ±2	L2	L3	T1	T2	T3	T4	T5	T6	T7	≈C 1	≈C 2
DAPS-0015-...-F03	20	28.8	32	159	80	24	-	8	10	13.2	6	7	4	11	8
DAPS-0015-...-F04								8							
DAPS-0030-...-F0305	20	32.3		174			9	8	10	13.2				11	9
DAPS-0030-...-F04								8							
DAPS-0060-...-F04	20	37.7		198			-	8	13	16.5				14	10
DAPS-0060-...-F0507								12							
DAPS-0106-...-F0507	20	44.8		237.1			12	9	13	19.3				17	12
DAPS-0180-...-F0710	30	56.5		289.9			15	12	16	24.8				22	15
DAPS-0240-...-F0710	30	60.1		313.6			15	12	17	24.8				22	15
DAPS-0360-...-F0710	30	62		339.3			15	12	19	24.3				22	19

Size	B1	B2	B3	B4	B5	D1 ∅ ±0.1	D2 ∅ ±0.1	D3	D4	D5	D6 ∅	D7	EE	H1	H2	
DAPS-0480-...-F1012	134.9	62	72.9	30	27	102	125	M12	M10	M5	29	M6	G $\frac{1}{4}$	164.9	72.9	
DAPS-0720-...-F1012	148	69.5	78.5		27	102	125	M12	M10		31.8			178	78.5	
DAPS-0960-...-F12	168	74.5	93.5		27	102	125	M12	M10		36.5			41	216	101.5
DAPS-0960-...-F14					27	140	-	-	M16							
DAPS-1440-...-F12	186	84.5	101.5		36	125	-	-	M12		46			237.7	114.7	
DAPS-1440-...-F14					36	140	-	-	M16							
DAPS-1920-...-F14	207.7	93	114.7		36	140	-	-	M16		46			237.7	114.7	
DAPS-1920-...-F1216					36	125	165	M20	M12							

Size	H3	H5	H7	L1	L2	L3	T1	T2	T3	T4	T5	T6	T7	≈C 1	≈C 2
DAPS-0480-...-F1012	30	57.4	32	387.7	80	24	18	15	19	29.5	6	7	4	27	19
DAPS-0720-...-F1012		61.5		433			18	15	19.5	29.5				27	22
DAPS-0960-...-F12		78		479.4			18	15	19.5	38.5				36	24
DAPS-0960-...-F14							-	24							
DAPS-1440-...-F12		86.5		567			-	18	19.5	38.5				36	27
DAPS-1440-...-F14								-	24						
DAPS-1920-...-F14		99.2		601			-	24	18.5	48.5				46	32
DAPS-1920-...-F1216								30	18						

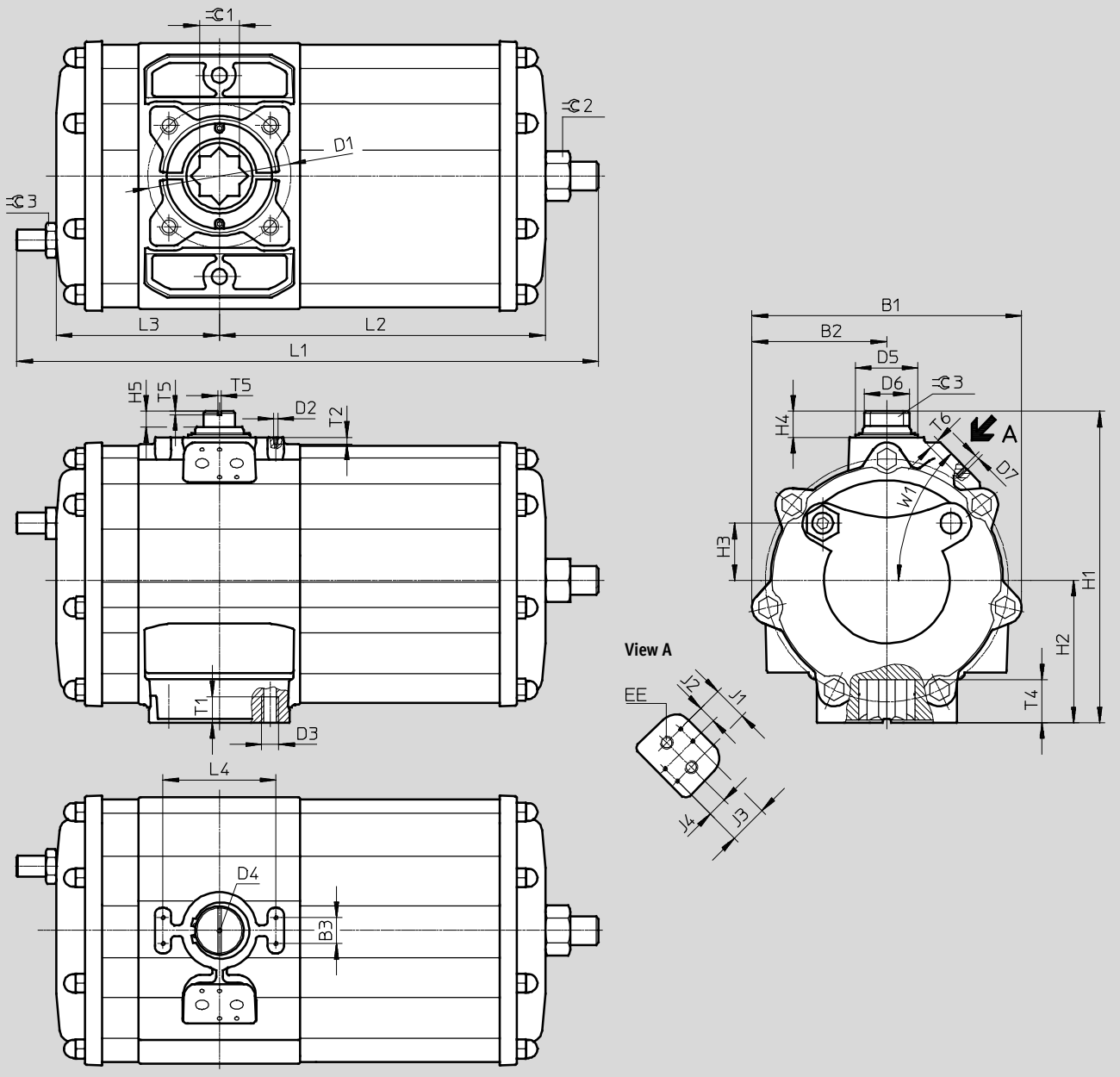
Quarter turn actuators DAPS, double-acting

Technical data

Dimensions

Size 2880

Download CAD data → www.festo.com



Size	B1	B2	B3	D1 ∅	D2	D3	D4	D5 ∅	D6 ∅	D7	EE	H1	H2	H3	H4	H5	J1
DAPS-2880-...	311	155	30	165	M5	M20	M6	72	52	M6	G $\frac{3}{8}$	359	164	66	30	18	40

Size	J2	J3	J4	L1 ±2	L2	L3	L4	T1	T2	T4 ±0.8	T5	T6	W1	≡1	≡2	≡3
DAPS-2880-...	20	45	22.5	667	372	188	130	30	8	49.5	4	10	45°	46	50	36

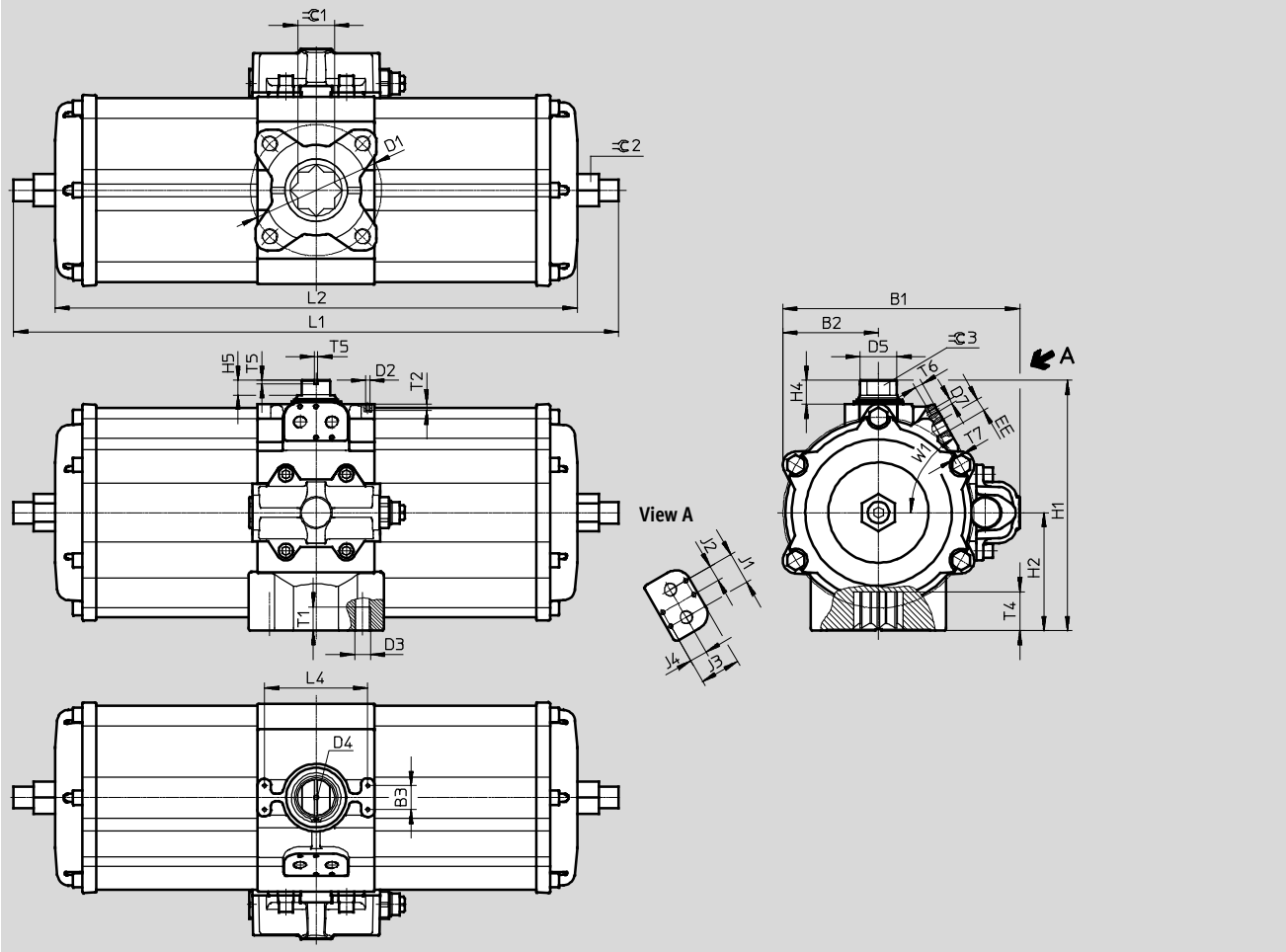
Quarter turn actuators DAPS, double-acting

Technical data

Dimensions

Size 3840

Download CAD data → www.festo.com



Size	B1	B2	B3	D1 ∅	D2	D3	D4	D5 ∅	D7	EE	H1	H2	H4	H5	J1	J2
DAPS-3840-...	298	120	30	165	M5	M20	M6	46	M6	G $\frac{3}{8}$	314	148.5	30	18.5	40	20

Size	J3	J4	L1 ±2	L2	L4	T1	T2	T4 ±1	T5	T6	T7	W1	$\varnothing 1$	$\varnothing 2$	$\varnothing 3$
DAPS-3840-...	45	22.5	765	614	130	30	8	49	4	10	13	60°	46	41	32

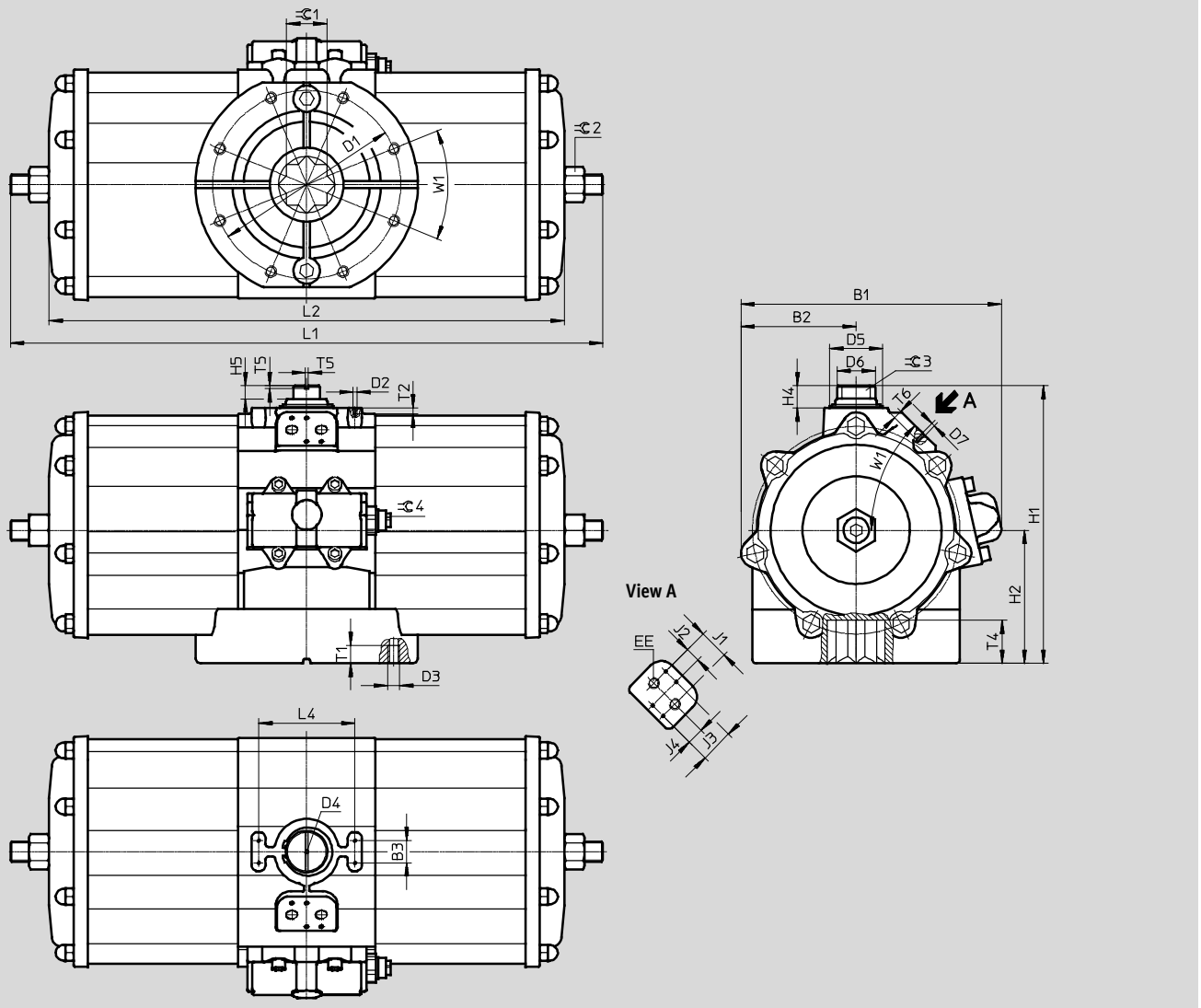
Quarter turn actuators DAPS, double-acting

Technical data

Dimensions

Size 5760

Download CAD data → www.festo.com



Size	B1	B2	B3	D1 Ø	D2	D3	D4	D5 Ø	D6	D7	EE	H1	H2	H4	H5	J1
DAPS-5760-...	361	155	30	254	M5	M16	M6	72	52	M6	G ³ / ₈	374	179	30	18	40

Size	J2	J3	J4	L1 ±2	L2	L4	T1	T2	T4 ±0.8	T5	T6	W1	≡C1	≡C2	≡C3	≡C4
DAPS-5760-...	20	45	22.5	885	744	130	24	8	58	4	10	45°	55	50	36	15

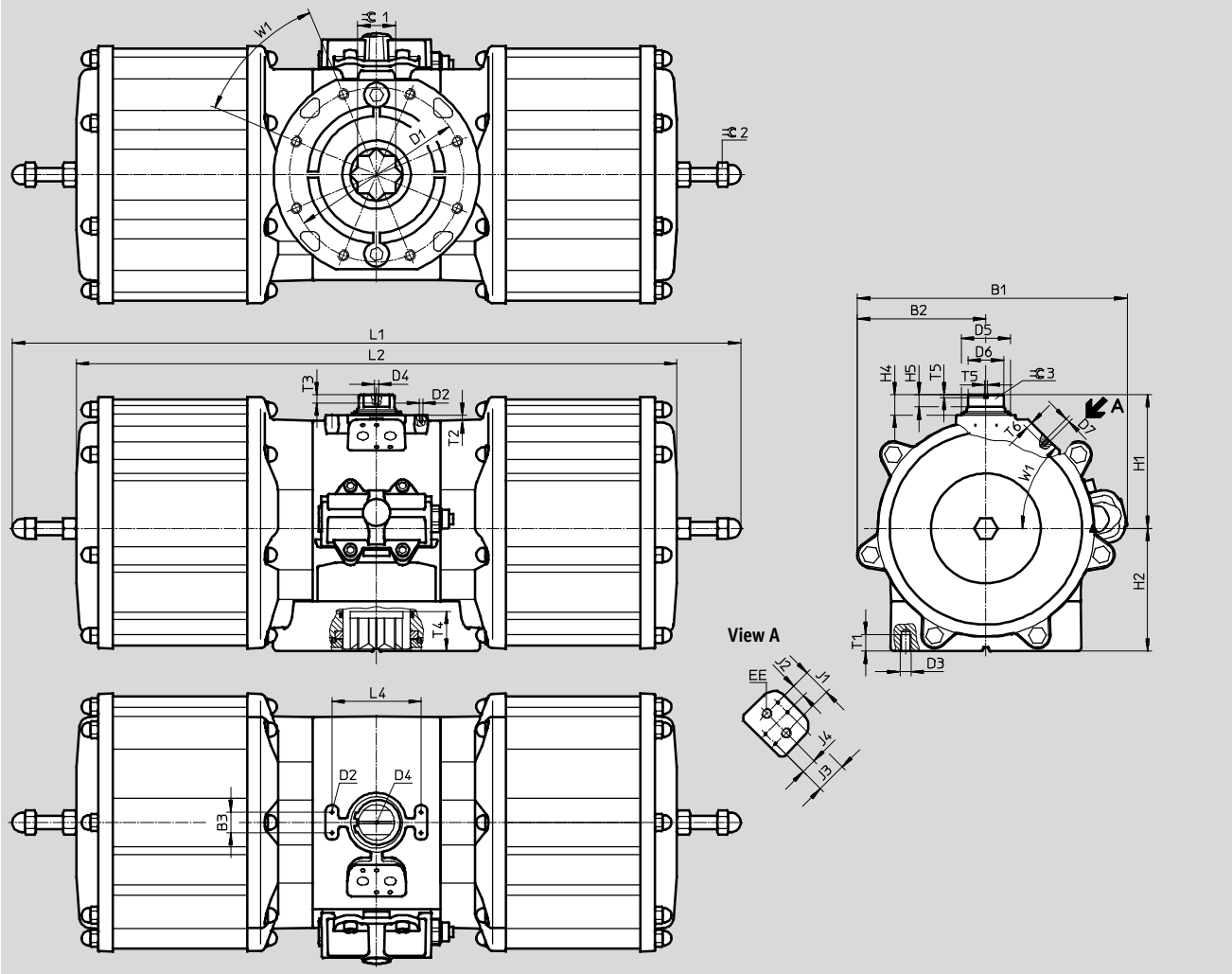
Quarter turn actuators DAPS, double-acting

Technical data

Dimensions

Size 8000

Download CAD data → www.festo.com



Size	B1	B2	B3	D1 ∅	D2	D3	D4	D5 ∅	D6 ∅	D7	EE	H1	H2	H4	H5	J1
DAPS-8000-...	394	188	30	254	M5	M16	M6	72	52	M6	G $\frac{3}{8}$	195	179	30	18	40

Size	J2	J3	J4	L1	L2	L4	T1	T2	T3	T4	T5	T6	W1	∠ 1	∠ 2	∠ 3
DAPS-8000-...	20	45	22.5	1,044	877	130	24	8	12	58	4	10	45°	55	30	36

Quarter turn actuators DAPS, double-acting

Technical data



Ordering data – Drives		Ordering data – Drives	
Part No.	Type	Part No.	Type
Size 0008		Size 0720	
549 666	DAPS-0008-090-R-F03	549 667	DAPS-0720-090-R-F1012
Size 0015		Size 0960	
533 417	DAPS-0015-090-R-F03	533 425	DAPS-0960-090-R-F1012
533 475	DAPS-0015-090-R-F04	533 478	DAPS-0960-090-R-F14
Size 0030		Size 1440	
533 418	DAPS-0030-090-R-F0305	549 668	DAPS-1440-090-R-F12
533 476	DAPS-0030-090-R-F04	549 669	DAPS-1440-090-R-F14
Size 0060		Size 1920	
533 419	DAPS-0060-090-R-F04	533 426	DAPS-1920-090-R-F14
533 477	DAPS-0060-090-R-F0507	533 479	DAPS-1920-090-R-F1216
Size 0106		Size 2880	
533 420	DAPS-0106-090-R-F0507	549 670	DAPS-2880-090-R-F16
Size 0180		Size 3840	
533 421	DAPS-0180-090-R-F0710	549 671	DAPS-3840-090-R-F16
Size 0240		Size 5760	
533 422	DAPS-0240-090-R-F0710	549 672	DAPS-5760-090-F25
Size 0360		Size 8000	
533 423	DAPS-0360-090-R-F0710	560 855	DAPS-8000-090-R-F25
Size 0480			
533 424	DAPS-0480-090-R-F1012		

Ordering data – Wearing parts kits		Ordering data – Wearing parts kits	
Part No.	Type	Part No.	Type
Size 0015		Size 0240	
397 470	DAPS-0015	397 475	DAPS-0240/S0120
Size 0030		Size 0360	
397 471	DAPS-0030/S0015	397 476	DAPS-0360/S0180
Size 0060		Size 0480	
397 472	DAPS-0060/S0030	397 477	DAPS-0480/S0240
Size 0106		Size 0960	
397 473	DAPS-0106/S0053	397 478	DAPS-0960/S0480
Size 0180		Size 1920	
397 474	DAPS-0180/S0090	397 479	DAPS-1920/S0960

Quarter turn actuators DAPS, double-acting

Technical data

FESTO

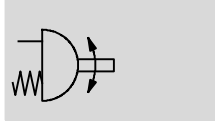
Ordering data – Drives for variant T6		Part No.	Type	Part No.	Type
Size 0015				Size 0720	
553170	DAPS-0015-090-R-F03-T6	553181	DAPS-0720-090-R-F1012-T6		
553171	DAPS-0015-090-R-F04-T6			Size 0960	
Size 0030				553182	DAPS-0960-090-R-F12-T6
553172	DAPS-0030-090-R-F0305-T6	553183	DAPS-0960-090-R-F14-T6		
553173	DAPS-0030-090-R-F04-T6	Size 1440			
Size 0060		553184	DAPS-1440-090-R-F12-T6	553185	DAPS-1440-090-R-F14-T6
553174	DAPS-0060-090-R-F04-T6			Size 1920	
553175	DAPS-0060-090-R-F0507-T6	553186	DAPS-1920-090-R-F14-T6	553187	DAPS-1920-090-R-F1216-T6
Size 0106		Size 2880			
553176	DAPS-0106-090-R-F0507-T6	553188	DAPS-2880-090-R-F16-T6		
Size 0180		Size 3840			
553177	DAPS-0180-090-R-F0710-T6	553189	DAPS-3840-090-R-F16-T6		
Size 0240		Size 5760			
553178	DAPS-0240-090-R-F0710-T6	553190	DAPS-5760-090-R-F25-T6		
Size 0360					
553179	DAPS-0360-090-R-F0710-T6				
Size 0480					
553180	DAPS-0480-090-R-F1012-T6				

Quarter turn actuators DAPS, single-acting

Technical data

FESTO

Function



Swivel angle
0 ... 90°

Wearing parts kits
→ 37



Size
0015 ... 4000

Torque
15 ... 4000 Nm

General technical data				
Size	0015 ... 0180	0240 ... 0960	1440 ... 1920	2880, 4000
Pneumatic connection	G1/8	G1/4	G3/8	G3/8
Design	Scotch yoke system			
Mode of operation	Single-acting			
Mounting position	Any			
Position sensing	None			
Cushioning	No cushioning			
Swivel angle	[°]	90		
End-position adjusting range at 0°	[°]	–	–	±5
End-position adjusting range at 90°	[°]	±2	±2	±5
Note regarding end-position adjusting range	One end position optionally adjustable			
Closing direction	Closes to the right			

Operating and environmental conditions	
Operating pressure ¹⁾	[bar] 2.8 ... 8.4
Nominal operating pressure	[bar] 5.6
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Ambient temperature	[°C] –20 ... +80
Ambient temperature for variant T6	[°C] –50 ... +60
Corrosion resistance class CRC ²⁾	3
Connection to process valve as per standard	ISO 5211
Valve connection as per standard	VDI/VDE 3845 (NAMUR)

1) Minimum operating pressures vary for single-acting rotary actuators depending upon spring quantity

2) Corrosion resistance class 3 according to Festo standard 940 070

Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.

ATEX	
ATEX category for gas	II 2G
Explosion ignition protection type for gas	c TX X
ATEX category for dust	II 2D
Explosion ignition protection type for dust	c TX X
Explosion-proof temperature rating	–20 °C ≤ Ta ≤ +60 °C
Explosion-proof temperature rating T6	–50 °C ≤ Ta ≤ +60 °C
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

Quarter turn actuators DAPS, single-acting

Technical data

FESTO

Air consumption [l/cycle] at 6 bar	
Size	
DAPS-0015	0.72
DAPS-0030	1.44
DAPS-0053	2.16
DAPS-0090	4.32
DAPS-0120	6
DAPS-0180	8.64
DAPS-0240	12
DAPS-0360	14
DAPS-0480	24
DAPS-0720	29.4
DAPS-0960	48
DAPS-1440	77
DAPS-1920	87.5
DAPS-2880	147
DAPS-4000	174.6

Weight [g]	
Size	
DAPS-0015	1,200
DAPS-0030	1,950
DAPS-0053	3,000
DAPS-0090	5,900
DAPS-0120	6,800
DAPS-0180	8,900
DAPS-0240	11,800
DAPS-0360	16,500
DAPS-0480	22,700
DAPS-0720	33,000
DAPS-0960	42,000
DAPS-1440	74,000
DAPS-1920	67,000
DAPS-2880	117,000
DAPS-4000	183,000

Materials		Material number
Housing	Wrought aluminium alloy	–
Cover	Wrought aluminium alloy	–
Shaft	High-alloy steel	1.4305
External screws	High-alloy steel	–
Seals	FPM, NBR, PUR	–
	T6 FVMQ, PTFE-reinforced	–
Note on materials	Conforms to RoHS	–
	T6 Contains PWIS (paint-wetting impairment substances), conforms to RoHS	–

Quarter turn actuators DAPS, single-acting

Technical data

Actual torque [Nm] as a function of operating pressure [bar], spring strength and swivel angle [°]																		
Spring strength	Spring torque [Nm]			Operating pressure [bar]														
				2.5			2.8			3			3.5			4.2		
	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°
DAPS-0015																		
1	5.0	3.7	7.5	6.2	2.9	3.7	7.5	3.7	5	8.4	4.2	5.9	10.6	5.6	8.1	13.8	7.4	11.3
2	6.3	4.7	9.4	-	-	-	-	-	-	7.2	3.3	4	9.4	4.7	6.3	12.6	6.5	9.4
3	7.5	5.6	11.3	-	-	-	-	-	-	-	-	-	8.2	3.7	4.4	11.3	5.6	7.5
4	10.0	7.5	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0030																		
1	10.0	7.5	15	12.3	5.9	7.3	15	7.5	10	16.8	8.6	11.8	21.3	11.3	16.3	27.5	15	22.5
2	12.5	9.4	18.8	-	-	-	-	-	-	14.3	6.7	8	18.8	9.4	12.5	25.1	13.2	18.8
3	15.0	11.3	22.5	-	-	-	-	-	-	-	-	-	16.3	7.5	8.8	22.5	11.3	15
4	20.0	15	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0053																		
1	17.5	13	26.5	21.8	10.2	12.8	26.5	13	17.5	29.6	14.9	20.6	37.5	19.5	28.5	48.5	26	39.5
2	22	16.5	33	-	-	-	-	-	-	25.1	11.8	14.1	33	16.5	22	44	23.1	33
3	26	19.5	40	-	-	-	-	-	-	-	-	-	29	13	15	40	19.5	26
4	35	26	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0090																		
1	30	22.5	45	37	17.7	22	45	22.5	30	50.4	25.7	35.4	63.8	33.8	48.8	82.5	45	67.5
2	37.5	28.1	56.3	-	-	-	-	-	-	42.9	20.1	24.1	56.3	28.1	37.5	75.1	39.4	56.3
3	45	33.9	67.5	-	-	-	-	-	-	-	-	-	48.8	22.6	26.3	67.5	33.9	45
4	60	45	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0120																		
1	40	30	60	49.3	23.6	29.3	60	30	40	67.1	34.3	47.1	85	45	65	110	60	90
2	50	37.5	75	-	-	-	-	-	-	57.1	26.8	32.1	75	37.5	50	100	52.5	75
3	60	45	90	-	-	-	-	-	-	-	-	-	65	30	35	90	45	60
4	80	60	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0180																		
1	60	45	90	73.9	35.4	43.9	90	45	60	100.7	51.4	70.7	127.5	67.5	97.5	165	90	135
2	75	56.3	112.5	-	-	-	-	-	-	85.7	40.2	48.2	112.5	56.3	75	150	78.8	112.5
3	90	67.5	135	-	-	-	-	-	-	-	-	-	97.5	45	52.5	135	67.5	90
4	120	90	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0240																		
1	80	60	120	98.6	47.1	58.6	120	60	80	134.3	68.6	94.3	170	90	130	220	120	180
2	100	75	150	-	-	-	-	-	-	114.3	53.6	64.3	150	75	100	200	105	150
3	120	90	180	-	-	-	-	-	-	-	-	-	130	60	70	180	90	120
4	160	120	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0360																		
1	120	90	180	147.9	70.7	87.9	180	90	120	201.4	102.9	141.1	255	135	195	330	180	270
2	150	112.5	225	-	-	-	-	-	-	171.4	80.4	96.4	225	112.5	150	300	157.5	225
3	180	135	270	-	-	-	-	-	-	-	-	-	195	90	105	270	135	180
4	240	180	360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Quarter turn actuators DAPS, single-acting

Technical data

FESTO

Actual torque [Nm] as a function of operating pressure [bar], spring strength and swivel angle [°]															
Spring strength	Operating pressure [bar]														
	5			5.6			6			7			8		
	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°
DAPS-0015															
1	-			-			-			-			-		
2	16.1	8.7	13	18.8	10.3	15.7	-			-			-		
3	14.9	7.7	11.1	17.6	9.3	13.8	19.4	10.4	15.6	23.8	13.1	20	28.3	15.7	24.5
4	12.3	5.9	7.3	15	7.5	10	16.8	8.6	11.8	21.3	11.3	16.3	25.7	13.9	20.7
DAPS-0030															
1	-			-			-			-			-		
2	32.2	17.5	25.9	37.6	20.7	31.3	-			-			-		
3	29.6	15.6	22.1	35	18.8	27.5	38.6	21	31.1	47.5	26.4	40	56.4	31.7	48.9
4	24.6	11.8	14.6	30	15	20	33.6	17.1	23.6	42.5	22.5	32.5	51.4	27.9	41.4
DAPS-0053															
1	-			-			-			-			-		
2	56.6	30.6	45.6	66	36.3	55	-			-			-		
3	52.6	26.9	38.6	62	32.5	48	68.3	36.2	54.3	84	45.5	70	99.7	54.8	85.7
4	43.6	20.4	25.6	53	26	35	59.3	29.7	41.3	75	39	57	90	48.3	72.7
DAPS-0090															
1	-			-			-			-			-		
2	96.5	52.2	77.7	112.6	61.9	93.8	-			-			-		
3	88.9	46.8	66.4	105	56.5	82.5	115.7	63	93.2	142.5	79.1	120	169.3	95.2	146.8
4	73.9	35.4	43.9	90	45	60	100.7	51.4	70.7	127.5	67.5	97.5	154.3	83.6	124.3
DAPS-0120															
1	-			-			-			-			-		
2	128.6	69.6	103.6	150	82.5	125	-			-			-		
3	118.6	62.1	88.6	140	75	110	154.3	83.6	124.3	190	105	160	225.7	126.4	195.7
4	98.6	47.1	58.6	120	60	80	134.4	68.6	94.3	170	90	130	205.7	111.4	165.7
DAPS-0180															
1	-			-			-			-			-		
2	192.9	104.5	155.4	225	123.8	187.5	-			-			-		
3	177.9	93.2	132.9	210	112.5	165	231.4	125.4	186.4	285	157.5	240	338.6	189.6	293.6
4	147.9	70.7	87.9	180	90	120	201.4	102.9	141.4	255	135	195	308.6	167.6	284.6
DAPS-0240															
1	-			-			-			-			-		
2	257.1	139.3	207.1	300	165	250	-			-			-		
3	237.1	124.3	177.1	280	150	220	308.6	167.1	248.6	380	210	320	451.4	252.9	391.4
4	197.1	94.3	117.1	240	120	160	268.6	137.1	188.6	340	180	260	411.4	222.9	331.4
DAPS-0360															
1	-			-			-			-			-		
2	385.7	208.9	310.7	450	247.5	375	-			-			-		
3	355.7	186.4	265.7	420	225	330	462.9	250.7	372.9	570	315	480	677.1	379.3	587.1
4	295.7	141.4	175.7	360	180	240	402.9	205.7	282.9	510	270	390	617.1	334.3	497.1

Torque for size at 5.6 bar and swivel angle 0°

Quarter turn actuators DAPS, single-acting

Technical data

Actual torque [Nm] as a function of operating pressure [bar], spring strength and swivel angle [°]																		
Spring strength	Spring torque [Nm]			Operating pressure [bar]														
				2.5			2.8			3			3.5			4.2		
	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°
DAPS-0480																		
1	160	120	240	197.1	94.3	117.1	240	120	160	268.6	137.1	188.6	340	180	260	440	240	360
2	200	150	300	-	-	-	-	-	-	228.6	107.1	128.6	300	150	200	400	210	300
3	240	180	360	-	-	-	-	-	-	-	-	-	260	120	140	360	180	240
4	320	240	480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0720																		
1	240	180	360	295.7	141.4	175.7	360	180	240	402.9	205.7	282.9	510	270	390	660	360	540
2	300	225	450	-	-	-	-	-	-	342.9	160.7	192.9	450	225	300	600	315	450
3	360	270	540	-	-	-	-	-	-	-	-	-	390	180	210	540	270	360
4	480	360	720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0960																		
1	320	240	480	394.3	188.6	234.3	480	240	320	537.1	274.3	377.1	680	360	520	880	480	720
2	400	300	600	-	-	-	-	-	-	457.1	214.3	257.1	600	300	400	800	420	600
3	480	360	720	-	-	-	-	-	-	-	-	-	520	240	280	720	360	480
4	640	480	960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-1440																		
1	480	360	720	591	282	351	720	360	480	805	411	565	1,020	540	780	1,320	720	1,080
2	600	450	900	-	-	-	-	-	-	685	321	385	900	450	600	1,200	630	900
3	720	540	1,080	-	-	-	-	-	-	-	-	-	780	360	420	1,080	540	720
4	960	720	1,440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-1920																		
1	640	480	960	778	377	468	960	480	640	1,074	548	754	1,360	720	1,040	1,760	960	1,440
2	800	600	1,200	-	-	-	-	-	-	914	428	514	1,200	600	800	1,600	840	1,200
3	960	720	1,440	-	-	-	-	-	-	-	-	-	1,040	480	560	1,440	720	960
4	1,280	960	1,920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-2880																		
1	960	720	1,440	1,183	566	703	1,440	720	960	1,611	823	1,131	2,040	1,080	1,560	2,640	1,440	2,160
2	1,200	900	1,800	-	-	-	-	-	-	1,370	643	771	1,800	900	1,200	2,400	1,260	1,800
3	1,440	1,080	2,160	-	-	-	-	-	-	-	-	-	1,560	720	840	2,160	1,080	1,440
4	1,920	1,440	2,880	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-4000																		
1	1,333	1,000	2,000	1,524	714	857	2,000	1,000	1,333	2,238	1,143	1,571	2,833	1,500	2,166	3,666	2,000	2,999
2	1,666	1,250	2,500	-	-	-	-	-	-	1,905	893	1,071	2,500	1,250	1,666	3,333	1,750	2,499
3	1,999	1,500	3,000	-	-	-	-	-	-	-	-	-	2,167	1,000	1,166	3,000	1,500	1,999
4	2,666	2,000	4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Quarter turn actuators DAPS, single-acting

Technical data

FESTO

Actual torque [Nm] as a function of operating pressure [bar], spring strength and swivel angle [°]															
Spring strength	Operating pressure [bar]														
	5			5.6			6			7			8		
	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°
DAPS-0480															
1	-			-			-			-			-		
2	514.3	278.6	414.3	600	330	500	-			-			-		
3	474.3	248.6	354.3	560	300	440	617.1	334.3	497.1	760	420	640	902.9	505.7	782.9
4	394.3	118.6	234.3	480	240	320	537.1	274.3	377.1	680	360	520	822.9	445.7	662.9
DAPS-0720															
1	-			-			-			-			-		
2	771.4	417.9	621.4	900	495	750	-			-			-		
3	711.4	372.9	531.4	840	450	660	925.7	501.4	745.7	1,140	630	960	1,354	758.6	1,174
4	591.4	282.9	351.4	720	360	480	805.7	411.4	565.7	1,020	540	780	1,234	668.6	994.3
DAPS-0960															
1	-			-			-			-			-		
2	1,028.6	557.1	828.6	1,200	660	1,000	-			-			-		
3	948.6	497.1	708.6	1,120	600	880	1,234.3	668.6	994.3	1,520	840	1,280	1,805.7	1,011.4	1,565.7
4	788.6	377.1	468.6	960	480	640	1,074.3	548.6	754.3	1,360	720	1,040	1,645.7	891.4	1,325.7
DAPS-1440															
1	-			-			-			-			-		
2	1,542	835	1,242	1,800	990	1,500	-			-			-		
3	1,422	745	1,062	1,680	900	1,320	1,851	1,002	1,491	2,280	1,260	1,920	2,708	1,517	2,348
4	1,182	565	702	1,440	720	960	1,611	822	1,131	2,040	1,080	1,560	2,468	1,337	1,988
DAPS-1920															
1	-			-			-			-			-		
2	2,057	1,114	1,657	2,400	1,320	2,000	-			-			-		
3	1,897	994	1,417	2,240	1,200	1,760	2,468	1,337	1,988	3,040	1,680	2,560	3,611	2,022	3,131
4	1,577	754	937	1,920	960	1,280	2,148	1,097	1,508	2,720	1,440	2,080	3,291	1,782	2,651
DAPS-2880															
1	-			-			-			-			-		
2	3,085	1,671	2,485	3,600	1,980	3,000	-			-			-		
3	2,845	1,491	2,125	3,360	1,800	2,640	3,702	2,006	2,982	4,560	2,520	3,840	5,417	3,034	4,697
4	2,365	1,131	1,405	2,880	1,440	1,920	3,222	1,645	2,262	4,080	2,160	3,120	4,937	2,674	3,977
DAPS-4000															
1	-			-			-			-			-		
2	4,285	2,321	3,451	5,000	2,750	4,166	-			-			-		
3	3,952	2,071	2,951	4,666	2,500	3,665	5,143	2,786	4,141	6,333	3,500	5,332	7,523	4,214	6,522
4	3,286	1,571	1,952	4,000	2,000	2,666	4,476	2,286	3,142	5,666	3,000	4,332	6,857	3,714	5,523

Torque for size at 5.6 bar and swivel angle 0°

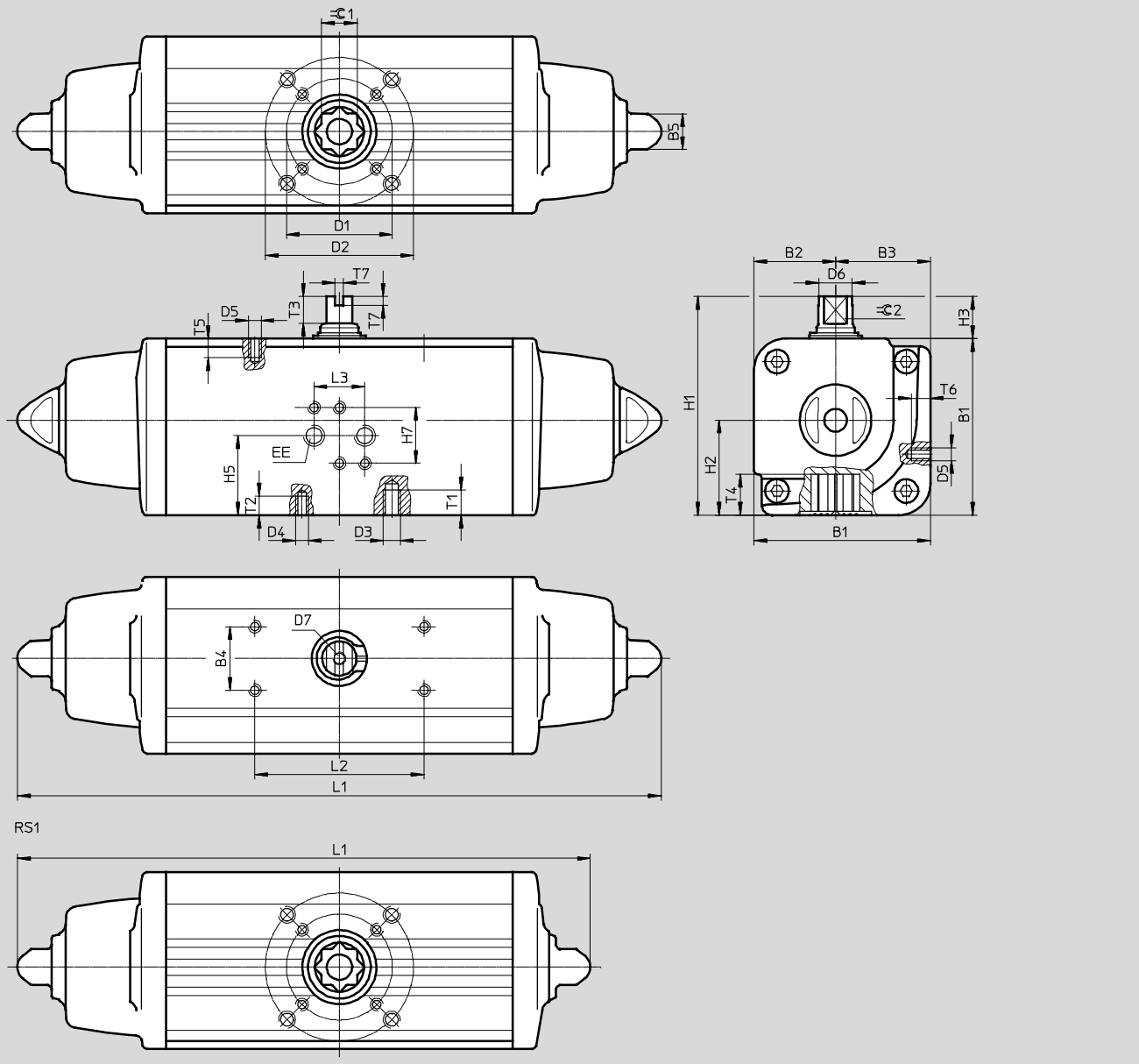
Quarter turn actuators DAPS, single-acting

Technical data

Dimensions

Size 0015 ... 0960

Download CAD data → www.festo.com



Quarter turn actuators DAPS, single-acting

Technical data

FESTO

Size	B1	B2	B3	B4	B5	D1 ∅ ±0.1	D2 ∅ ±0.1	D3	D4	D5	D6 ∅	D7	EE	H1	H2	H3
DAPS-0015-...-F0305	59.2	27.7	31.5	30	13	36	50	M6	M5	M5	10.9	M6	G $\frac{1}{8}$	79.2	31.5	20
DAPS-0015-...-F04					13	42	-	-						14.5	90.4	37.7
DAPS-0030-...-F04	70.4	32.7	37.7		13	42	-	-	M5		16.2			103.3	44.8	20
DAPS-0030-...-F0507					13	50	70	M8	M6		20.2			137.5	56.5	30
DAPS-0053-...-F0507	83.3	38.5	44.8		17	50	70	M8	M6		22.5			141.1	60.1	30
DAPS-0090-...-F0710	107.5	51	56.5		22	70	102	M10	M8		25.5			148	62	30
DAPS-0120-...-F0710	111.1	51	60.1		22	70	102	M10	M8							
DAPS-0180-...-F0710	118	56	62		22	70	102	M10	M8							

Size	H5	H7	L1		L2	L3	T1	T2	T3	T4	T5	T6	T7	≈C1	≈C2
			RS1	RS...											
DAPS-0015-...-F0305	32.3	32	203.8	233.3	80	24	9	8	10	13.2	6	7	4	11	9
DAPS-0015-...-F04							-								
DAPS-0030-...-F04	37.7		228.5	259			-	8	13	16.5				14	10
DAPS-0030-...-F0507							12	9							
DAPS-0053-...-F0507	44.8		270.7	304.3			12	9	13	19.3				17	12
DAPS-0090-...-F0710	56.5		341.8	393.7			15	12	16	24.8				22	15
DAPS-0120-...-F0710	60.1		361.6	409.6			15	12	17	24.8				22	15
DAPS-0180-...-F0710	62		406.6	474			15	12	19	24.3				22	19

Size	B1	B2	B3	B4	B5	D1 ∅	D2 ∅	D3	D4	D5	D6 ∅	D7	EE	H1	H2	H3
DAPS-0240-...-F1012	134.9	62	72.9	30	27	102	125	M12	M10	M5	29	M6	G $\frac{1}{4}$	164.9	72.9	30
DAPS-0360-...-F1012	148	69.5	78.5		27	102	125	M12	M10		31.8			178	78.5	
DAPS-0480-...-F1012	168	74.5	93.5		27	102	125	M12	M10		36.5			198	93.5	
DAPS-0480-...-F14					27	140	-	-	M16							
DAPS-0720-...-F12	186	84.5	101.5		36	125	-	-	M12		41			216	101.5	
DAPS-0720-...-F14					36	140			M16							
DAPS-0960-...-F14	207.7	93	114.7		36	140	-	-	M16		46			237.7	114.7	
DAPS-0960-...-F1216					36	125	165	M20	M12							

Size	H5	H7	L1		L2	L3	T1	T2	T3	T4	T5	T6	T7	≈C1	≈C2
			RS1	RS...											
DAPS-0240-...-F1012	57.4	32	454	520.5	80	24	18	15	19	29.5	6	7	4	27	19
DAPS-0360-...-F1012	61.5		523	613			18	15	19.5	29.5				27	22
DAPS-0480-...-F1012	78		563.8	648.2			18	15	19.5	38.5				36	24
DAPS-0480-...-F14							-	24							
DAPS-0720-...-F12	86.5		683	798			-	18	19.5	38.5				36	27
DAPS-0720-...-F14							-	24							
DAPS-0960-...-F14	99.2		714.4	828			-	24	18.5	48.5				46	32
DAPS-0960-...-F1216							30	18							

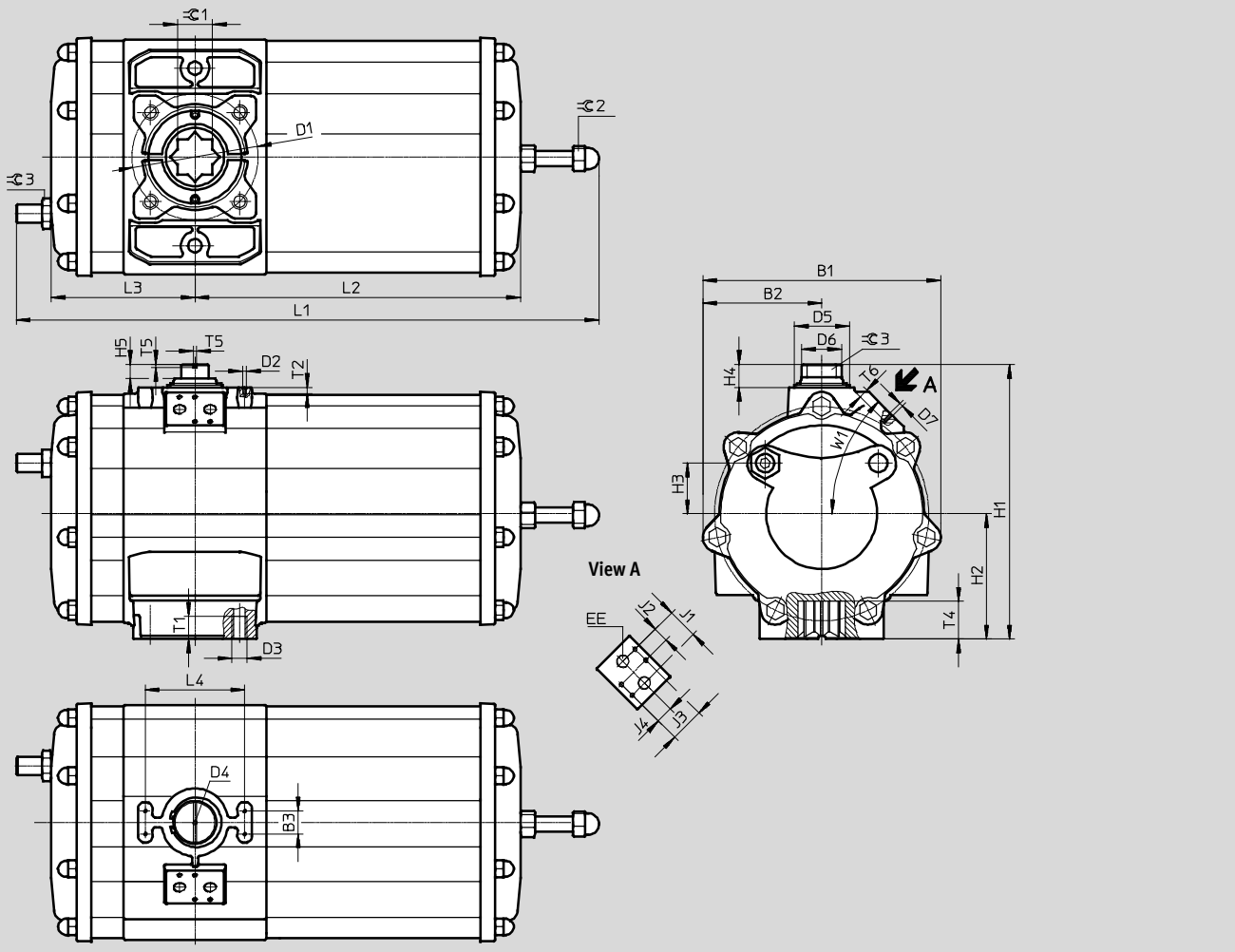
Quarter turn actuators DAPS, single-acting

Technical data

Dimensions

Size 1440

Download CAD data → www.festo.com



Size	B1	B2	B3	D1 Ø	D2	D3	D4	D5 Ø	D6 Ø	D7	EE	H1	H2	H3	H4	H5	J1
DAPS-1440-...	311	155	30	165	M5	M20	M6	72	52	M6	G $\frac{3}{8}$	359	164	66	30	18	40

Size	J2	J3	J4	L1 ±3	L2	L3	L4	T1	T2	T4 ±0.8	T5	T6	W1	$\approx C 1$	$\approx C 2$	$\approx C 3$
DAPS-1440-...	20	45	22.5	834	498	188	130	30	8	49.5	4	10	45°	46	30	36

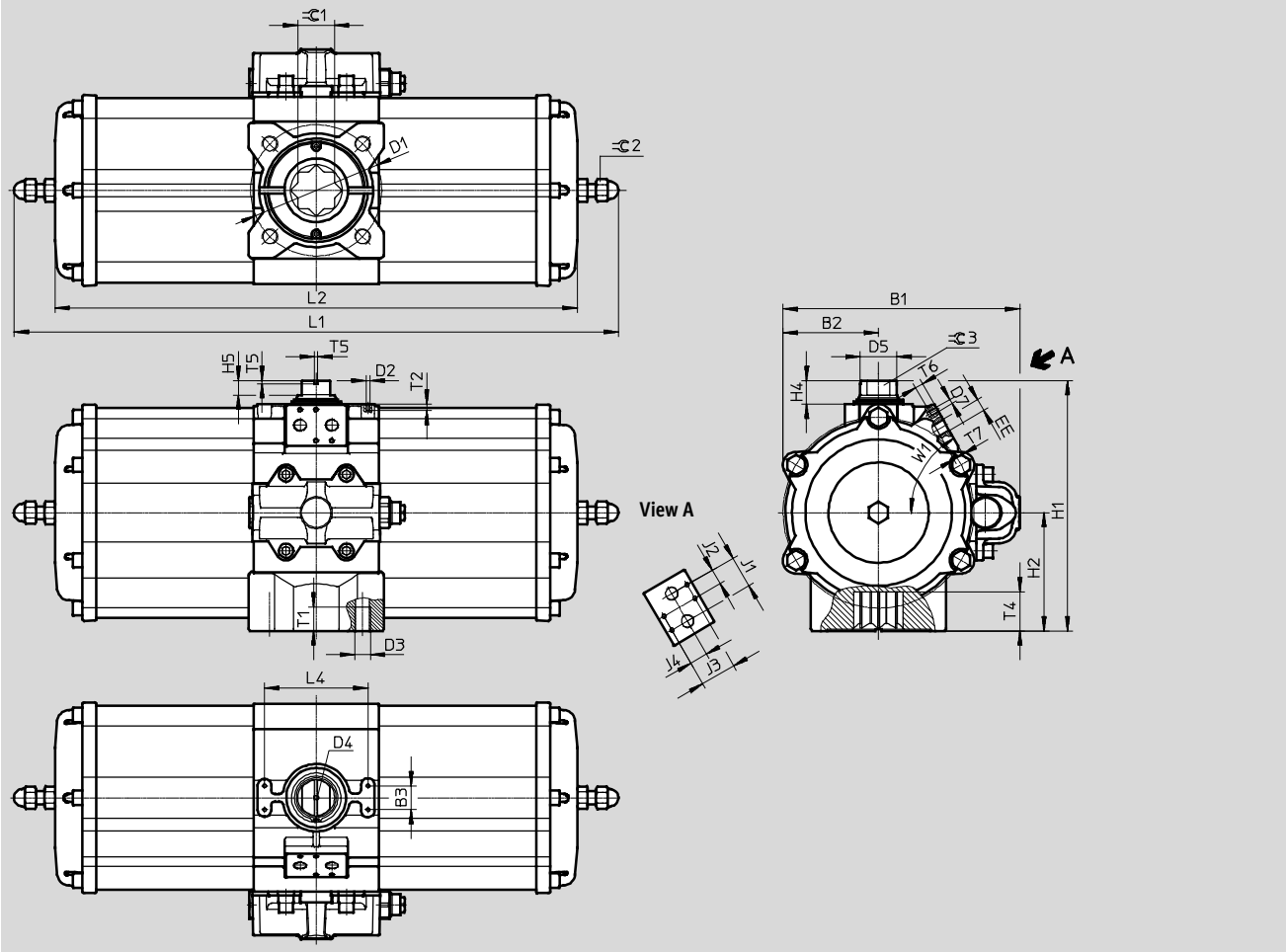
Quarter turn actuators DAPS, single-acting

Technical data

Dimensions

Size 1920

Download CAD data → www.festo.com



Size	B1	B2	B3	D1 ∅	D2	D3	D4	D5 ∅	D7	EE	H1	H2	H4	H5	J1	J2
DAPS-1920-...	298	120	30	165	M5	M20	M6	46	M6	G $\frac{3}{8}$	314	148.5	30	18.5	40	20

Size	J3	J4	L1 ±3	L2	L4	T1	T2	T4 ±1	T5	T6	T7	W1	$\varnothing 1$	$\varnothing 2$	$\varnothing 3$
DAPS-1920-...	45	22.5	1001	857	130	30	8	49	4	10	13	60°	46	24	32

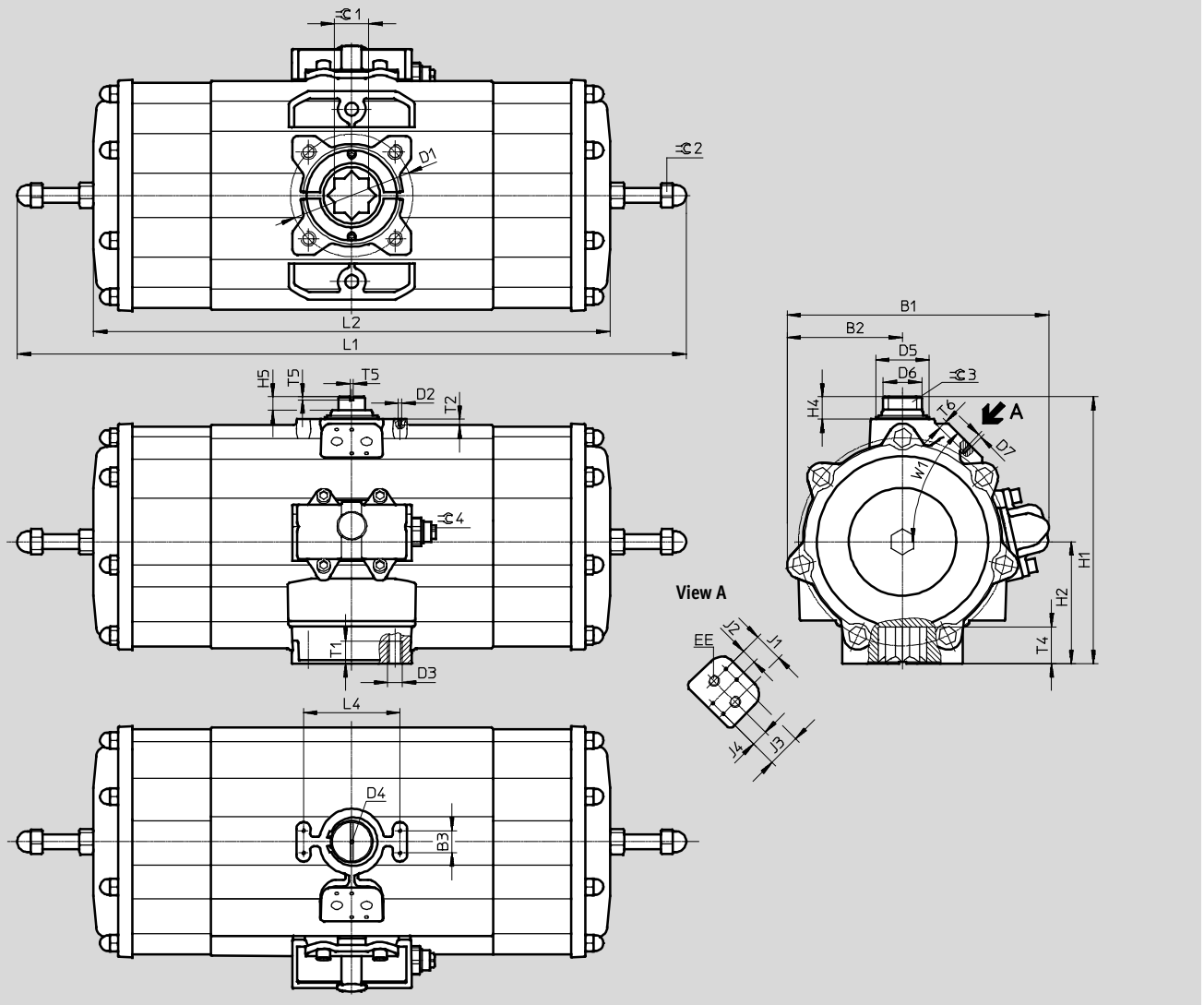
Quarter turn actuators DAPS, single-acting

Technical data

Dimensions

Size 2880

Download CAD data → www.festo.com



Size	B1	B2	B3	D1	D2	D3	D4	D5	D6	D7	EE	H1	H2	H4	H5	J1
DAPS-2880-...	361	155	30	165 ∅	M5	M20	M6	72 ∅	52 ∅	M6	G3/8	359	164	30	18	40

Size	J2	J3	J4	L1	L2	L4	T1	T2	T4	T5	T6	W1	≅ 1	≅ 2	≅ 3	≅ 4
DAPS-2880-...	20	45	22.5	1,201 ±3	996	130	30	8	49.5	4	10	45°	46	30	36	15

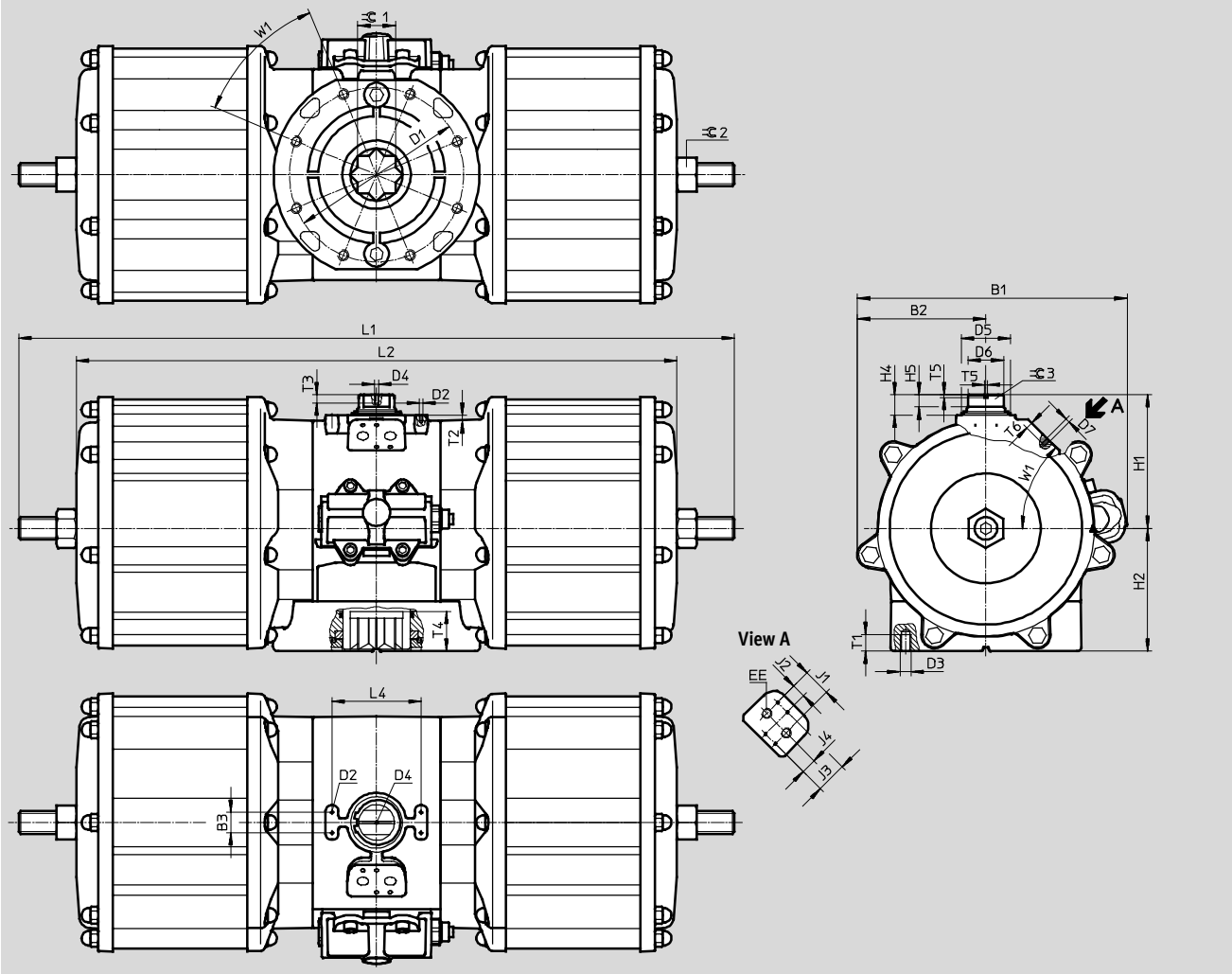
Quarter turn actuators DAPS, single-acting

Technical data

Dimensions

Size 4000

Download CAD data → www.festo.com



Size	B1	B2	B3	D1 ∅	D2	D3	D4	D5 ∅	D6 ∅	D7	EE	H1	H2	H4	H5	J1
DAPS-4000-...	394	188	30	254	M5	M16	M6	72	52	M6	G $\frac{3}{8}$	195	179	30	18	40

Size	J2	J3	J4	L1	L2	L4	T1	T2	T3	T4	T5	T6	W1	$\varnothing 1$	$\varnothing 2$	$\varnothing 3$
DAPS-4000-...	20	45	22.5	1,370	1,184	130	24	8	12	58	4	10	45°	55	50	36

Quarter turn actuators DAPS, single-acting

Technical data

FESTO

Ordering data		Ordering data	
Part No.	Type	Part No.	Type
Size 0015		Size 0480	
533 427	DAPS-0015-090-RS1-F0305	533 455	DAPS-0480-090-RS1-F1012
533 480	DAPS-0015-090-RS1-F04	533 488	DAPS-0480-090-RS1-F14
533 428	DAPS-0015-090-RS2-F0305	533 456	DAPS-0480-090-RS2-F1012
533 481	DAPS-0015-090-RS2-F04	533 489	DAPS-0480-090-RS2-F14
533 429	DAPS-0015-090-RS3-F0305	533 457	DAPS-0480-090-RS3-F1012
533 482	DAPS-0015-090-RS3-F04	533 490	DAPS-0480-090-RS3-F14
533 430	DAPS-0015-090-RS4-F0305	533 458	DAPS-0480-090-RS4-F1012
533 483	DAPS-0015-090-RS4-F04	533 491	DAPS-0480-090-RS4-F14
Size 0030		Size 0720	
533 431	DAPS-0030-090-RS1-F04	549 677	DAPS-0720-090-RS1-F12
533 484	DAPS-0030-090-RS1-F0507	549 681	DAPS-0720-090-RS1-F14
533 432	DAPS-0030-090-RS2-F04	549 678	DAPS-0720-090-RS2-F12
533 485	DAPS-0030-090-RS2-F0507	549 682	DAPS-0720-090-RS2-F14
533 433	DAPS-0030-090-RS3-F04	549 679	DAPS-0720-090-RS3-F12
533 486	DAPS-0030-090-RS3-F0507	549 683	DAPS-0720-090-RS3-F14
533 434	DAPS-0030-090-RS4-F04	549 680	DAPS-0720-090-RS4-F12
533 487	DAPS-0030-090-RS4-F0507	549 684	DAPS-0720-090-RS4-F14
Size 0053		Size 0960	
533 435	DAPS-0053-090-RS1-F0507	533 459	DAPS-0960-090-RS1-F14
533 436	DAPS-0053-090-RS2-F0507	533 492	DAPS-0960-090-RS1-F1216
533 437	DAPS-0053-090-RS3-F0507	533 460	DAPS-0960-090-RS2-F14
533 438	DAPS-0053-090-RS4-F0507	533 493	DAPS-0960-090-RS2-F1216
Size 0090		Size 1440	
533 439	DAPS-0090-090-RS1-F0710	549 685	DAPS-1440-090-RS1-F16
533 440	DAPS-0090-090-RS2-F0710	549 686	DAPS-1440-090-RS2-F16
533 441	DAPS-0090-090-RS3-F0710	549 687	DAPS-1440-090-RS3-F16
533 442	DAPS-0090-090-RS4-F0710	549 688	DAPS-1440-090-RS4-F16
Size 0120		Size 1920	
533 443	DAPS-0120-090-RS1-F0710	549 689	DAPS-1920-090-RS1-F16
533 444	DAPS-0120-090-RS2-F0710	549 690	DAPS-1920-090-RS2-F16
533 445	DAPS-0120-090-RS3-F0710	549 691	DAPS-1920-090-RS3-F16
533 446	DAPS-0120-090-RS4-F0710	549 692	DAPS-1920-090-RS4-F16
Size 0180		Size 2880	
533 447	DAPS-0180-090-RS1-F0710	549 693	DAPS-2880-090-RS1-F16
533 448	DAPS-0180-090-RS2-F0710	549 694	DAPS-2880-090-RS2-F16
533 449	DAPS-0180-090-RS3-F0710	549 695	DAPS-2880-090-RS3-F16
533 450	DAPS-0180-090-RS4-F0710	549 696	DAPS-2880-090-RS4-F16
Size 0240		Size 4000	
533 451	DAPS-0240-090-RS1-F1012	560 856	DAPS-4000-090-RS1-F25
533 452	DAPS-0240-090-RS2-F1012	561 694	DAPS-4000-090-RS2-F25
533 453	DAPS-0240-090-RS3-F1012	561 695	DAPS-4000-090-RS3-F25
533 454	DAPS-0240-090-RS4-F1012	561 696	DAPS-4000-090-RS4-F25
Size 0360			
549 673	DAPS-0360-090-RS1-F1012		
549 674	DAPS-0360-090-RS2-F1012		
549 675	DAPS-0360-090-RS3-F1012		
549 676	DAPS-0360-090-RS4-F1012		

Quarter turn actuators DAPS, single-acting

Technical data



Ordering data – Wearing parts kits		Ordering data – Wearing parts kits	
Part No.	Type	Part No.	Type
Size 0015		Size 0180	
397 471	DAPS-0030/S0015	397 476	DAPS-0360/S0180
Size 0030		Size 0240	
397 472	DAPS-0060/S0030	397 477	DAPS-0480/S0240
Size 0053		Size 0480	
397 473	DAPS-0106/S0053	397 478	DAPS-0960/S0480
Size 0090		Size 0960	
397 474	DAPS-0180/S0090	397 479	DAPS-1920/S0960
Size 0120			
397 475	DAPS-0240/S0120		

Quarter turn actuators DAPS, single-acting

Technical data

FESTO

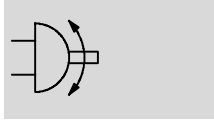
Ordering data – Drives for variant T6			
Part No.	Type	Part No.	Type
Size 0015		Size 0480	
553191	DAPS-0015-090-RS2-F0305-T6	553201	DAPS-0480-090-RS2-F12-T6
553192	DAPS-0015-090-RS2-F04-T6	553202	DAPS-0480-090-RS2-F14-T6
553210	DAPS-0015-090-RS3-F0305-T6	553220	DAPS-0480-090-RS3-F12-T6
553211	DAPS-0015-090-RS3-F04-T6	553221	DAPS-0480-090-RS3-F14-T6
553229	DAPS-0015-090-RS4-F0305-T6	553239	DAPS-0480-090-RS4-F12-T6
553230	DAPS-0015-090-RS4-F04-T6	553240	DAPS-0480-090-RS4-F14-T6
Size 0030		Size 0720	
553193	DAPS-0030-090-RS2-F04-T6	553203	DAPS-0720-090-RS2-F12-T6
553194	DAPS-0030-090-RS2-F0507-T6	553204	DAPS-0720-090-RS2-F14-T6
553212	DAPS-0030-090-RS3-F04-T6	553222	DAPS-0720-090-RS3-F12-T6
553213	DAPS-0030-090-RS3-F0507-T6	553223	DAPS-0720-090-RS3-F14-T6
553231	DAPS-0030-090-RS4-F04-T6	553241	DAPS-0720-090-RS4-F12-T6
553232	DAPS-0030-090-RS4-F0507-T6	553242	DAPS-0720-090-RS4-F14-T6
Size 0053		Size 0960	
553195	DAPS-0053-090-RS2-F0507-T6	553205	DAPS-0960-090-RS2-F14-T6
553214	DAPS-0053-090-RS3-F0507-T6	553206	DAPS-0960-090-RS2-F1216-T6
553233	DAPS-0053-090-RS4-F0507-T6	553224	DAPS-0960-090-RS3-F14-T6
Size 0090		553225	DAPS-0960-090-RS3-F1216-T6
553196	DAPS-0090-090-RS2-F0710-T6	553243	DAPS-0960-090-RS4-F14-T6
553215	DAPS-0090-090-RS3-F0710-T6	553244	DAPS-0960-090-RS4-F1216-T6
553234	DAPS-0090-090-RS4-F0710-T6	Size 1440	
Size 0120		553207	DAPS-1440-090-RS2-F16-T6
553197	DAPS-0120-090-RS2-F0710-T6	553245	DAPS-1440-090-RS4-F16-T6
553216	DAPS-0120-090-RS3-F0710-T6	Size 1920	
553235	DAPS-0120-090-RS4-F0710-T6	553208	DAPS-1920-090-RS2-F16-T6
Size 0180		553227	DAPS-1920-090-RS3-F16-T6
553198	DAPS-0180-090-RS2-F0710-T6	553246	DAPS-1920-090-RS4-F16-T6
553217	DAPS-0180-090-RS3-F0710-T6	Size 2880	
553236	DAPS-0180-090-RS4-F0710-T6	553209	DAPS-2880-090-RS2-F16-T6
Size 0240		553228	DAPS-2880-090-RS3-F16-T6
553199	DAPS-0240-090-RS2-F1012-T6	553247	DAPS-2880-090-RS4-F16-T6
553218	DAPS-0240-090-RS3-F1012-T6		
553237	DAPS-0240-090-RS4-F1012-T6		
Size 0360			
553200	DAPS-0360-090-RS2-F1012-T6		
553219	DAPS-0360-090-RS3-F1012-T6		
553238	DAPS-0360-090-RS4-F1012-T6		


Quarter turn actuators DAPS CR, double-acting

Technical data


FESTO


Function



 Swivel angle
0 ... 90°



 Size
0015 ... 0480

 Torque
15 ... 480 Nm

General technical data						
Size	0015	0030	0060	0120	0240	0480
Pneumatic connection	G $\frac{1}{8}$					
Design	Scotch yoke system					
Mode of operation	Double-acting					
Mounting position	Any					
Position sensing	None					
Cushioning	No cushioning					
Swivel angle	[°] 90					
Closing direction	Closes to right					

Operating and environmental conditions						
Size	0015	0030	0060	0120	0240	0480
Operating pressure	[bar] 2.5 ... 8.4					
Nominal operating pressure	[bar] 5.6					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)					
Ambient temperature	[°C] -20 ... +80					
Corrosion resistance class CRC ¹⁾	3					
Connection to process valve as per standard	-		ISO 5211			
Valve connection as per standard	-		VDI/VDE 3845 (NAMUR)			

1) Corrosion resistance class 3 according to Festo standard 940 070
Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.

ATEX	
ATEX category for gas	II 2G
Explosion ignition protection type for gas	c TX X
ATEX category for dust	II 2D
Explosion ignition protection type for dust	c TX X
Explosion-proof temperature rating	-20 °C ≤ Ta ≤ +60 °C
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

Quarter turn actuators DAPS CR, double-acting

Technical data

Air consumption [l/cycle 0°-90°-0°] at 6 bar			
Size		Size	
DAPS-0015	0.5	DAPS-0720	3.6
DAPS-0030	0.9	DAPS-0960	7.1
DAPS-0060	1.7	DAPS-1440	14.3

Weight [g]			
Size		Size	
DAPS-0015	800	DAPS-0120	3,300
DAPS-0030	1,200	DAPS-0240	5,600
DAPS-0060	1,800	DAPS-0480	9,500

Materials		
Quarter turn actuators		Material number
Housing	High-alloy stainless steel	1.4408
Cover	High-alloy stainless steel	1.4408
Shaft	High-alloy stainless steel	1.4301
External screws	High-alloy stainless steel	-
Seals	FPM, NBR, PUR	-
Note on materials	Conforms to RoHS	-

Actual torque [Nm] as a function of operating pressure [bar] and swivel angle [°]									
Size	Swivel angle [°]	Operating pressure [bar]							
		2.5	3	4	5	5.6	6	7	8
DAPS-0015	0	6.7	8	10.7	13.4	15	16.1	18.8	21.4
	50	3.3	4	5.4	6.7	7.5	8	9.4	10.7
	90	5	6.1	8.1	10.1	11.3	12.1	14.1	16.1
DAPS-0030	0	13.4	16.1	21.4	26.8	30	32.1	37.5	42.9
	50	6.7	8	10.7	13.4	15	16.1	18.8	21.4
	90	10	12.1	16.1	20.1	22.5	24.1	28.1	32.1
DAPS-0060	0	26.8	32.1	42.9	53.6	60	64.3	75	85.7
	50	13.4	16.1	21.4	26.8	30	32.1	37.5	42.9
	90	20.1	24.1	32.1	40.2	45	48.2	56.3	64.3
DAPS-0120	0	53.6	64.3	85.7	107.1	120	128.6	150	171.4
	50	26.8	32.1	42.9	53.6	60	64.3	75	85.7
	90	40.2	48.2	64.3	80.4	90	96.4	112.5	128.6
DAPS-0240	0	107.1	128.6	171.4	214.3	240	257.1	300	342.9
	50	53.6	64.3	85.7	107.1	120	128.6	150	171.4
	90	80.4	96.4	128.6	160.7	180	192.9	225	257.1
DAPS-0480	0	214.3	257.1	342.9	428.6	480	514.3	600	685.7
	50	107.1	128.6	171.4	214.3	240	257.1	300	342.9
	90	160.7	192.9	257.1	321.4	360	385.7	450	514.3

Torque for size at 5.6 bar and swivel angle 0°

Quarter turn actuators DAPS CR, double-acting

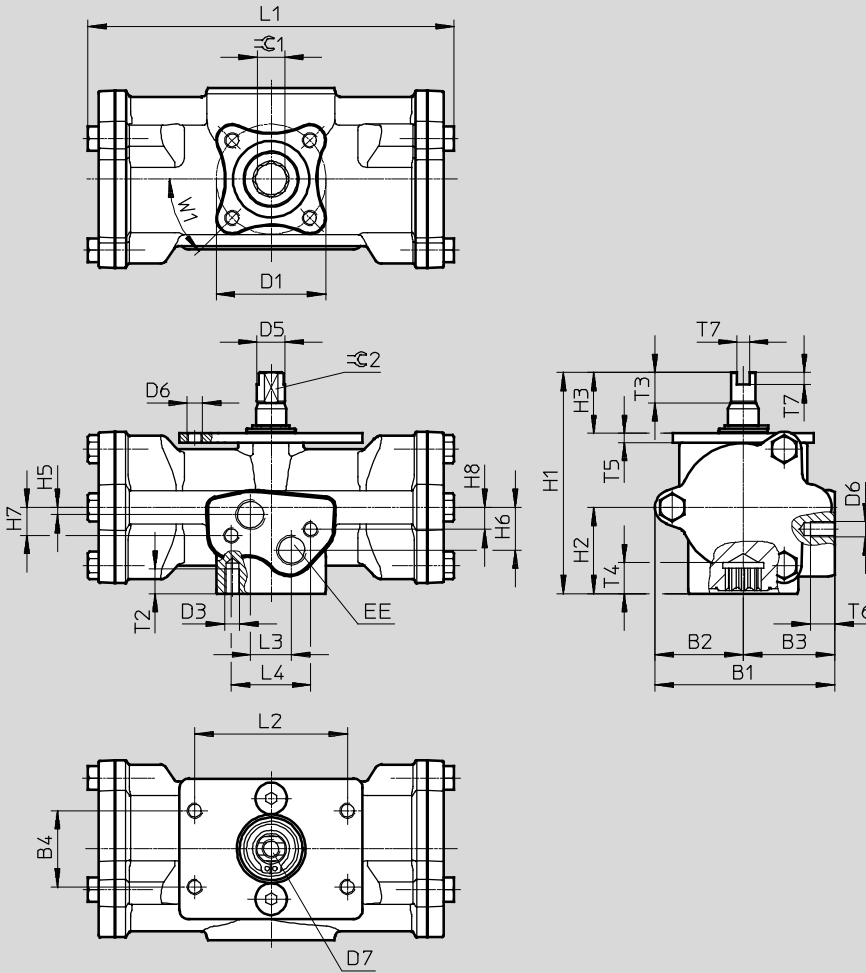
Technical data

FESTO

Dimensions

DAPS-...-090-R-F03-CR

Download CAD data → www.festo.com



Size	B1	B2	B3	B4	D1 Ø	D3	D5 Ø	D6	D7	EE	H1	H2	H3	H5	H6
DAPS-0015-090-R-F03-CR	59	29	30	25	36	M5	9.2	M5	M6	G ¹ / ₈	72.4	28.2	20	2.4	14
DAPS-0030-090-R-F03-CR	68.1	34.1	34	25	36	M5	10.9	M5	M6	G ¹ / ₈	80.4	32.7	20	3	16

Size	H7	H8	L1 ±2	L2	L3	L4	T2	T3	T4 ±0.4	T5	T6	T7	⊖ 1 H11	⊖ 2 h11	W1
DAPS-0015-090-R-F03-CR	9.2	7.2	120	50	13.4	26	8	10	10.1	3	8	4	9	8	45°
DAPS-0030-090-R-F03-CR	10.5	8.5	134.6	50	12	26	8	10	10.2	3	8	4	9	9	45°

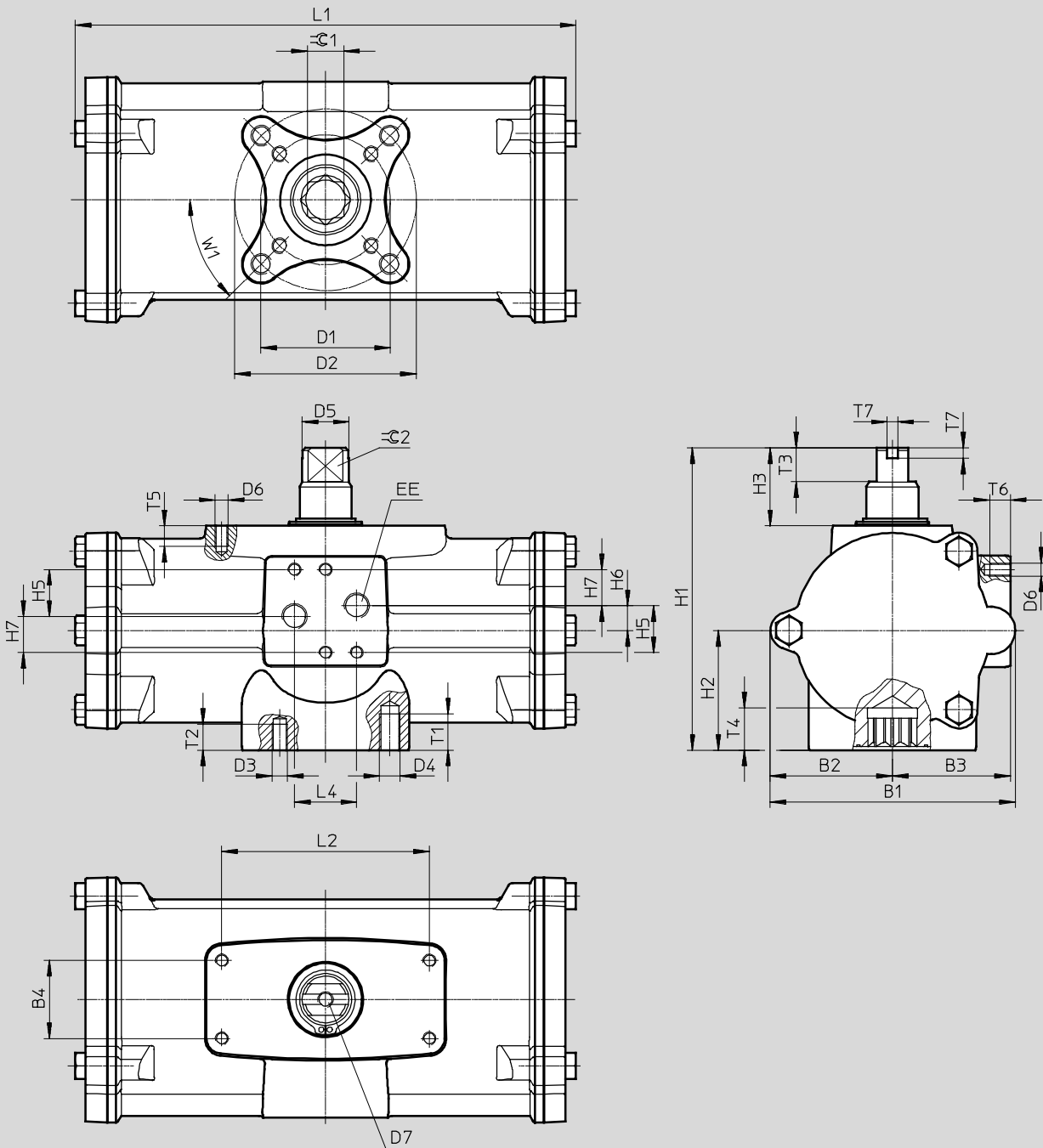
Quarter turn actuators DAPS CR, double-acting

Technical data

Dimensions

DAPS-...-090-R-...-CR

Download CAD data → www.festo.com



Quarter turn actuators DAPS CR, double-acting

Technical data

FESTO

Size	B1	B2	B3	B4	D1 ∅ ±0.1	D2 ∅ ±0.1	D3	D4	D5 ∅	D6	D7	EE	H1	H2	H3	H5
DAPS-0060-...-R-F0305-CR	80.3	41.1	39.2	25	36	50	M5	M6	14.5	M5	M6	G1/8	92.4	37.6	20	18
DAPS-0120-...-R-F0507-CR	94.4	47	45.5	30	50	70	M6	M8	18	M5	M6	G1/8	116.5	46.1	30	18
DAPS-240-...-R-F0507-CR	117	60.2	54.5	30	50	70	M6	M8	22.5	M5	M6	G1/8	136.4	56.1	30	18
DAPS-480-...-R-F0710-CR	139.7	71	67	30	70	102	M8	M10	29	M5	M6	G1/8	160	68	30	18

Size	H6	H7	L1 ±2	L2	L4	T1	T2	T3	T4 ±0.4	T5	T6	T7	≈C 1 H11	≈C 2 h11	W1
DAPS-0060-...-R-F0305-CR	9.6	14	158.4	50	24	10	8	13	12.1	8	8	4	11	10	45°
DAPS-0120-...-R-F0507-CR	9.6	14	192.9	80	24	14	10	13	16.3	8	8	4	14	12	45°
DAPS-240-...-R-F0507-CR	10	14	246.7	80	24	14	10	17	19.3	8	8	4	17	15	45°
DAPS-480-...-R-F0710-CR	10	14	298.4	80	24	16	14	19	24.3	8	8	4	22	19	45°

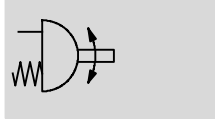
Ordering data		Ordering data	
Part No.	Type	Part No.	Type
Size 0015		Size 0120	
552869	DAPS-0015-090-R-F03-CR	552872	DAPS-0120-090-R-F0507-CR
Size 0030		Size 0240	
552870	DAPS-0030-090-R-F03-CR	552873	DAPS-0240-090-R-F0507-CR
Size 0060		Size 0480	
552871	DAPS-0060-090-R-F0305-CR	552874	DAPS-0480-090-R-F0710-CR


Quarter turn actuators DAPS CR, single-acting

Technical data


FESTO


Function



 Swivel angle
0 ... 90°



 Size
0015 ... 0240

 Torque
15 ... 240 Nm

General technical data					
Size	0015	0030	0060	0120	0240
Pneumatic connection	G $\frac{1}{8}$				
Design	Scotch yoke system				
Mode of operation	Single-acting				
Mounting position	Any				
Position sensing	None				
Cushioning	No cushioning				
Swivel angle [°]	90				
Closing direction	Closes to right				

Operating and environmental conditions					
Size	0015	0030	0060	0120	0240
Nominal operating pressure [bar]	5.6				
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]				
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)				
Ambient temperature [°C]	-20 ... +80				
Corrosion resistance class CRC ¹⁾	3				
Connection to process valve as per standard	-		ISO 5211		
Valve connection as per standard	-		VDI/VDE 3845 (NAMUR)		

1) Corrosion resistance class 3 according to Festo standard 940 070
Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.

ATEX	
ATEX category for gas	II 2G
Explosion ignition protection type for gas	c TX X
ATEX category for dust	II 2D
Explosion ignition protection type for dust	c TX X
Explosion-proof temperature rating	-20 °C ≤ Ta ≤ +60 °C
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

Quarter turn actuators DAPS CR, single-acting

Technical data

Pressure ranges [bar]					
Type	Connection pressure	Operating pressure	Type	Connection pressure	Operating pressure
Size 0015			Size 0120		
DAPS-0015-090-RS1-F03-CR	2.8	2.8 ... 8.4	DAPS-0120-090-RS1-F0507-CR	2.8	2.8 ... 8.4
DAPS-0015-090-RS2-F03-CR	3.5	3.5 ... 8.4	DAPS-0120-090-RS2-F0507-CR	3.5	3.5 ... 8.4
DAPS-0015-090-RS3-F03-CR	4.2	4.2 ... 8.4	DAPS-0120-090-RS3-F0507-CR	4.2	4.2 ... 8.4
DAPS-0015-090-RS4-F03-CR	5.6	5.6 ... 8.4	DAPS-0120-090-RS4-F0507-CR	5.6	5.6 ... 8.4
Size 0030			Size 0240		
DAPS-0030-090-RS1-F0305-CR	2.8	2.8 ... 8.4	DAPS-0240-090-RS1-F0710-CR	2.8	2.8 ... 8.4
DAPS-0030-090-RS2-F0305-CR	3.5	3.5 ... 8.4	DAPS-0240-090-RS2-F0710-CR	3.5	3.5 ... 8.4
DAPS-0030-090-RS3-F0305-CR	4.2	4.2 ... 8.4	DAPS-0240-090-RS3-F0710-CR	4.2	4.2 ... 8.4
DAPS-0030-090-RS4-F0305-CR	5.6	5.6 ... 8.4	DAPS-0240-090-RS4-F0710-CR	5.6	5.6 ... 8.4
Size 0060					
DAPS-0060-090-RS1-F0507-CR	2.8	2.8 ... 8.4			
DAPS-0060-090-RS2-F0507-CR	3.5	3.5 ... 8.4			
DAPS-0060-090-RS3-F0507-CR	4.2	4.2 ... 8.4			
DAPS-0060-090-RS4-F0507-CR	5.6	5.6 ... 8.4			

Air consumption [l/cycle] at 6 bar			
Size		Size	
DAPS-0015	0.5	DAPS-0120	4.2
DAPS-0030	1	DAPS-0240	8.3
DAPS-0060	2		

Weight [g]			
Size		Size	
DAPS-0015	1,600	DAPS-0120	7,600
DAPS-0030	2,400	DAPS-0240	12,900
DAPS-0060	4,500		

Materials		
Quarter turn actuators		Material number
Housing	High-alloy stainless steel	1.4408
Cover	High-alloy stainless steel	1.4408
Shaft	High-alloy stainless steel	1.4301
External screws	High-alloy stainless steel	–
Seals	FPM, NBR, PUR	–
Note on materials	Conforms to RoHS	–

Quarter turn actuators DAPS CR, single-acting

Technical data

Actual torque [Nm] as a function of operating pressure [bar], spring strength and swivel angle [°]																		
Spring strength	Spring torque [Nm]			Operating pressure [bar]														
				2.5			2.8			3			3.5			4.2		
	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°
DAPS-0015																		
1	5.0	3.7	7.5	6.2	2.9	3.7	7.5	3.7	5	8.4	4.2	5.9	10.6	5.6	8.1	13.8	7.4	11.3
2	6.3	4.7	9.4	-	-	-	-	-	-	7.2	3.3	4	9.4	4.7	6.3	12.6	6.5	9.4
3	7.5	5.6	11.3	-	-	-	-	-	-	-	-	-	8.2	3.7	4.4	11.3	5.6	7.5
4	10.0	7.5	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0030																		
1	10.0	7.5	15	12.3	5.9	7.3	15	7.5	10	16.8	8.6	11.8	21.3	11.3	16.3	27.5	15	22.5
2	12.5	9.4	18.8	-	-	-	-	-	-	14.3	6.7	8	18.8	9.4	12.5	25.1	13.2	18.8
3	15.0	11.3	22.5	-	-	-	-	-	-	-	-	-	16.3	7.5	8.8	22.5	11.3	15
4	20.0	15	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0060																		
1	20	15	30	24.6	11.8	14.6	30	15	20	33.6	17.1	23.6	42.5	22.5	32.5	55	30	45
2	25	18.8	37.5	-	-	-	-	-	-	28.6	13.4	16.1	37.5	18.8	25	50	26.3	37.5
3	30	22.5	45	-	-	-	-	-	-	-	-	-	32.5	15	17.5	45	22.5	30
4	40	30	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0120																		
1	40	30	60	49.3	23.6	29.3	60	30	40	67.1	34.3	47.1	85	45	65	110	60	90
2	50	37.5	75	-	-	-	-	-	-	57.1	26.8	32.1	75	37.5	50	100	52.5	75
3	60	45	90	-	-	-	-	-	-	-	-	-	65	30	35	90	45	60
4	80	60	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0240																		
1	80	60	120	98.6	47.1	58.6	120	60	80	134.3	68.6	94.3	170	90	130	220	120	180
2	100	75	150	-	-	-	-	-	-	114.3	53.6	64.3	150	75	100	200	105	150
3	120	90	180	-	-	-	-	-	-	-	-	-	130	60	70	180	90	120
4	160	120	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Quarter turn actuators DAPS CR, single-acting

Technical data

FESTO

Actual torque [Nm] as a function of operating pressure [bar], spring strength and swivel angle [°]																		
Spring strength	Spring torque [Nm]			Operating pressure [bar]														
				5			5.6			6			7			8		
	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°
DAPS-0015																		
1	5.0	3.7	7.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	6.3	4.7	9.4	16.1	8.7	13	18.8	10.3	15.7	–	–	–	–	–	–	–	–	–
3	7.5	5.6	11.3	14.9	7.7	11.1	17.6	9.3	13.8	19.4	10.4	15.6	23.8	13.1	20	28.3	15.7	24.5
4	10.0	7.5	15	12.3	5.9	7.3	15	7.5	10	16.8	8.6	11.8	21.3	11.3	16.3	25.7	13.9	20.7
DAPS-0030																		
1	10.0	7.5	15	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	12.5	9.4	18.8	32.2	17.5	25.9	37.6	20.7	31.3	–	–	–	–	–	–	–	–	–
3	15.0	11.3	22.5	29.6	15.6	22.1	35	18.8	27.5	38.6	21	31.1	47.5	26.4	40	56.4	31.7	48.9
4	20.0	15	30	24.6	11.8	14.6	30	15	20	33.6	17.1	23.6	42.5	22.5	32.5	51.4	27.9	41.4
DAPS-0060																		
1	20	15	30	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	25	18.8	37.5	64.3	34.9	51.8	75	41.4	62.5	–	–	–	–	–	–	–	–	–
3	30	22.5	45	59.3	31.1	44.3	70	37.5	55	77.1	41.8	62.1	95	52.5	80	112.9	63.2	97.9
4	40	30	60	49.3	23.6	29.3	60	30	40	67.1	34.3	47.1	85	45	65	102.9	55.7	82.9
DAPS-0120																		
1	40	30	60	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	50	37.5	75	128.6	69.6	103.6	150	82.5	125	–	–	–	–	–	–	–	–	–
3	60	45	90	118.6	62.1	88.6	140	75	110	154.3	83.6	124.3	190	105	160	225.7	126.4	195.7
4	80	60	120	98.6	47.1	58.6	120	60	80	134.3	68.6	94.3	170	90	130	205.7	111.4	165.7
DAPS-0240																		
1	80	60	120	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	100	75	150	257.1	139.3	207.1	300	165	250	–	–	–	–	–	–	–	–	–
3	120	90	180	237.1	124.3	177.1	280	150	220	308.6	167.1	248.6	380	210	320	451.4	252.9	391.4
4	160	120	240	197.1	94.3	117.1	240	120	160	268.6	137.1	188.6	340	180	260	411.4	222.9	331.4

Torque for size at 5.6 bar and swivel angle 0°

Quarter turn actuators DAPS CR, single-acting

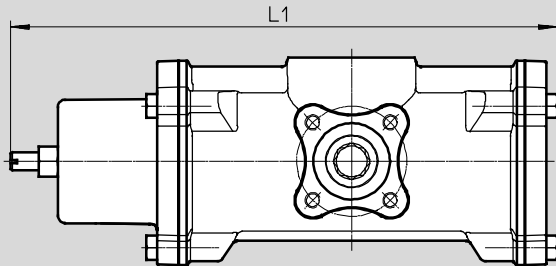
Technical data

Dimensions

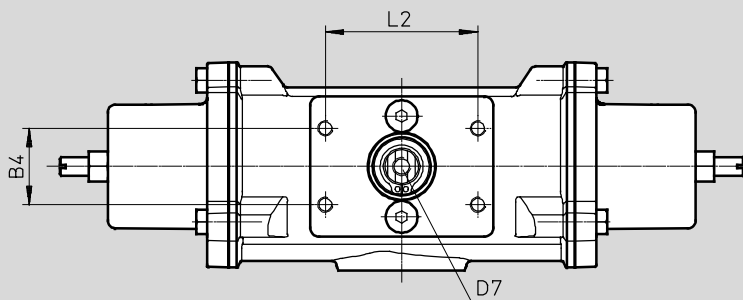
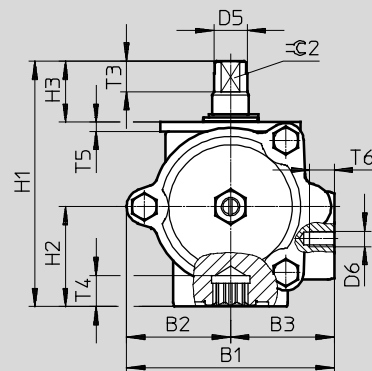
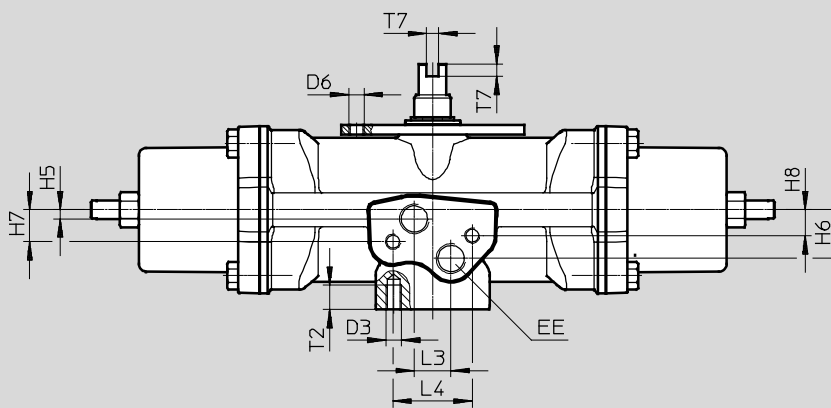
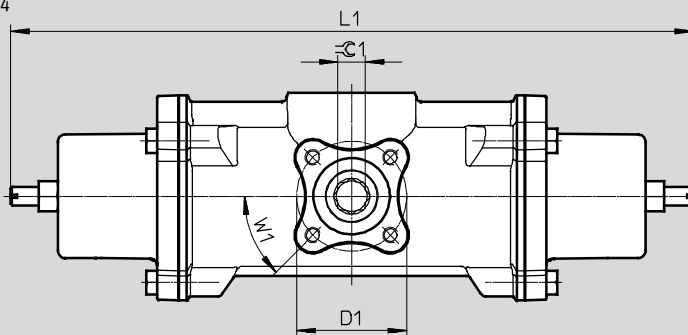
DAPS-0015-090-...-F03-CR

Download CAD data → www.festo.com

RS 1



RS 2 ... RS 4



Quarter turn actuators DAPS CR, single-acting

Technical data

FESTO

Size	B1	B2	B3	B4	D1	D3	D5	D6	D7	EE	H1	H2	H3	H5	H6	H7
DAPS-0015-090-RS-F03-CR	68.1	34.1	34	25	36	M5	10.9	M5	M6	G $\frac{1}{8}$	80.4	32.7	20	3	16	10.5

Size	H8	L1 ±2		L2	L3	L4	T2	T3	T4	T5	T6	T7	⊖ 1	⊖ 2	W1
		RS 1	RS 2 ... RS 4										H11	h11	
DAPS-0015-090-RS-F03-CR	8.5	179	224	50	12	26	8	10	10.2	3	8	4	9	9	45°

Quarter turn actuators DAPS CR, single-acting

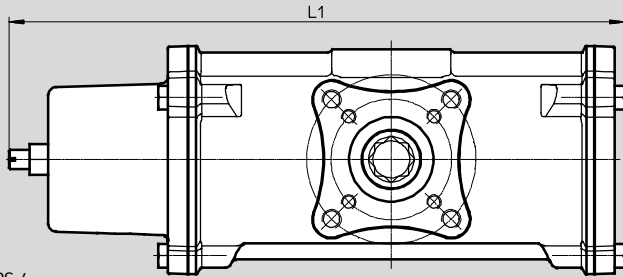
Technical data

Dimensions

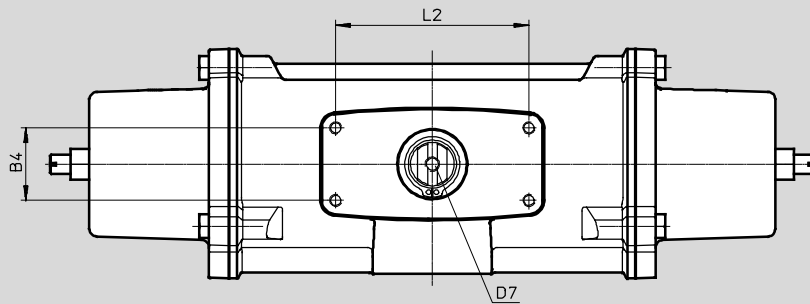
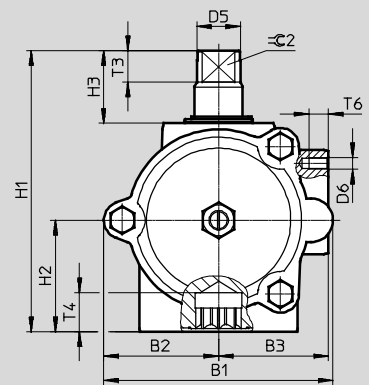
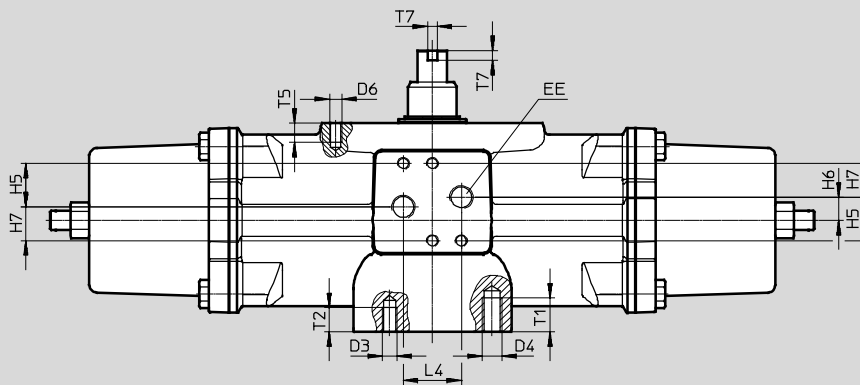
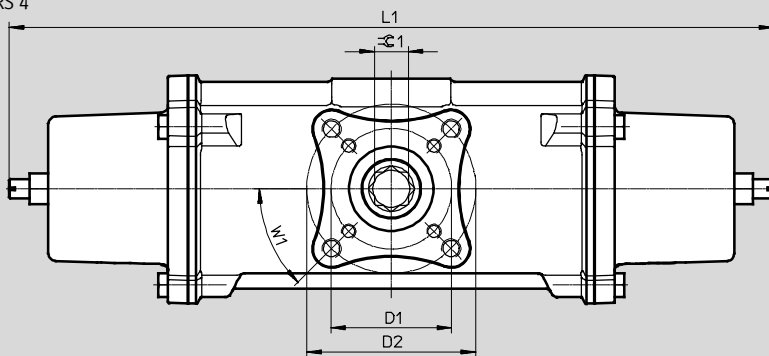
DAPS-...-090-...-CR

Download CAD data → www.festo.com/en/engineering

RS 1



RS 2 ... RS 4



Quarter turn actuators DAPS CR, single-acting



Technical data

Size	B1	B2	B3	B4	D1 ∅	D2 ∅	D3	D4	D5 ∅	D6	D7	EE	H1	H2	H3	H5
DAPS-0030- ... -F0305-CR	80.3	41.1	39.2	25	36	50	M5	M6	14.5	M5	M6	G $\frac{1}{8}$	92.4	37.6	20	18
DAPS-0060- ... -F0507-CR	94.4	47	45.5	30	50	70	M6	M8	18	M5	M6	G $\frac{1}{8}$	116.4	46.2	30	18
DAPS-0120- ... -F0507-CR	117	60.2	54.5	30	50	70	M6	M8	22.5	M5	M6	G $\frac{1}{8}$	136.4	56.1	30	18
DAPS-0240- ... -F0710-CR	139.7	70.9	67	30	70	102	M8	M10	29	M5	M6	G $\frac{1}{8}$	160	67.9	30	18

Size	H6	H7	L1 ±2		L2	L4	T1	T2	T3	T4	T5	T6	T7	≈C 1	≈C 2	W1
			RS 1	RS 2 ... RS 4										H11	h11	
DAPS-0030- ... -F0305-CR	9.6	14	202.3	246.2	50	24	10	8	13	±0.4	8	8	4	11	10	45°
DAPS-0060- ... -F0507-CR	9.5	14	254.7	316.5	80	24	14	10	13	±0.4	8	8	4	14	12	45°
DAPS-0120- ... -F0507-CR	10	14	311.5	376.2	80	24	14	10	17	±0.4	8	8	4	17	15	45°
DAPS-0240- ... -F0710-CR	10	14	381	464	80	24	16	14	19	±0.4	8	8	4	22	19	45°

Ordering data		Part No.	Type	Part No.	Type
Size 0015		Size 0120			
552875	DAPS-0015-090-RS1-F03-CR	552887	DAPS-0120-090-RS1-F0507-CR		
552876	DAPS-0015-090-RS2-F03-CR	552888	DAPS-0120-090-RS2-F0507-CR		
552877	DAPS-0015-090-RS3-F03-CR	552889	DAPS-0120-090-RS3-F0507-CR		
552878	DAPS-0015-090-RS4-F03-CR	552890	DAPS-0120-090-RS4-F0507-CR		
Size 0030		Size 0240			
552879	DAPS-0030-090-RS1-F0305-CR	552891	DAPS-0240-090-RS1-F0710-CR		
552880	DAPS-0030-090-RS2-F0305-CR	552892	DAPS-0240-090-RS2-F0710-CR		
552881	DAPS-0030-090-RS3-F0305-CR	552893	DAPS-0240-090-RS3-F0710-CR		
552882	DAPS-0030-090-RS4-F0305-CR	552894	DAPS-0240-090-RS4-F0710-CR		
Size 0060					
552883	DAPS-0060-090-RS1-F0507-CR				
552884	DAPS-0060-090-RS2-F0507-CR				
552885	DAPS-0060-090-RS3-F0507-CR				
552886	DAPS-0060-090-RS4-F0507-CR				

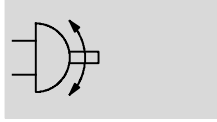
New
DAPS with handwheel

Quarter turn actuators DAPS with handwheel, double-acting

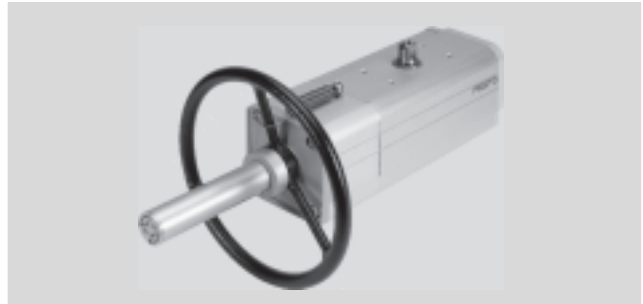
FESTO

Technical data

Function



Swivel angle
0 ... 90°



- Size
0106 ... 1920
- Torque
0106 ... 1,920 Nm

General technical data					
Size	0106	0180	0240	0360	0480
Pneumatic connection	G $\frac{1}{8}$				G $\frac{1}{4}$
Shaft connection depth	19.3	24.8	24.8	24.3	29.5
End-position adjusting range at 0°	-1 ... 9				
Design	Scotch yoke system				
Mode of operation	Double-acting				
Mounting position	Any				
Position sensing	None				
Cushioning	No cushioning				
Swivel angle [°]	90				
Closing direction	Closes to the right				

Size	0720	0960	1440	1920
Pneumatic connection	G $\frac{1}{4}$			
Shaft connection depth	29.5	38.5	38.5	48.5
End-position adjusting range at 0°	-1 ... 9			
Design	Scotch yoke system			
Mode of operation	Double-acting			
Mounting position	Any			
Position sensing	None			
Cushioning	No cushioning			
Swivel angle [°]	90			
Closing direction	Closes to the right			

Quarter turn actuators DAPS with handwheel, double-acting

FESTO

Technical data

Operating and environmental conditions		0106	0180	0240	0360	0480
Size						
Operating pressure ¹⁾	[bar]	1 ... 8.4				
Nominal operating pressure	[bar]	5.6				
Operating medium		Compressed air in accordance with ISO 8573-1:2010 [7:4:4]				
Note on operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)				
Ambient temperature	[°C]	-20 ... 80				
Ambient temperature for variant T6	[°C]	-50 ... 60				
Corrosion resistance class CRC ²⁾		2				
Connection to process valve as per standard		ISO 5211				
Valve connection conforms to standard		VDI/VDE 3845 (NAMUR)				

Size		0720	0960	1440	1920
Operating pressure ¹⁾	[bar]	1 ... 8.4			
Nominal operating pressure	[bar]	5.6			
Operating medium		Compressed air in accordance with ISO 8573-1:2010 [7:4:4]			
Note on operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)			
Ambient temperature	[°C]	-20 ... 80			
Ambient temperature for variant T6	[°C]	-50 ... 60			
Corrosion resistance class CRC ²⁾		2			
Connection to process valve as per standard		ISO 5211			
Valve connection conforms to standard		VDI/VDE 3845 (NAMUR)			

1) Operating pressure for variant T6 3...8.4 bar

2) Corrosion resistance class 2 according to Festo standard 940 070

Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

ATEX	
ATEX category for gas	II 2G
Explosion ignition protection type for gas	c TX X
ATEX category for dust	II 2D
Explosion ignition protection type for dust	c TX X
Explosion-proof temperature	-20 °C ≤ Ta ≤ +60 °C
Explosion-proof temperature [T6]	-50 °C ≤ Ta ≤ +60 °C
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

Quarter turn actuators DAPS with handwheel, double-acting

Technical data

Air consumption [l/cycle 0°-90°-0°] at 6 bar			
Size		Size	
0106	4.2	0720	27.6
0180	7.2	0960	36.3
0240	9.9	1440	58.2
0360	8.3	1920	77.4
0480	19.2		

Weight [g]			
Size		Size	
0106	4,000	0720	17,800
0180	6,000	0960	23,800
0240	8,000	1440	33,600
0360	10,200	1920	43,000
0480	13,200		

Materials		
Quarter turn actuators		Material number
Housing	Wrought aluminium alloy	-
Cover	Wrought aluminium alloy	-
	[T6] Wrought aluminium alloy	-
Shaft	High-alloy steel	1.4305
Screws	High-alloy steel	-
Seals	NBR, PUR, FPM	-
	[T6] PTFE reinforced, FVMQ	-
Note on materials	Conforms to RoHS	-
	[T6] Contains PWIS (paint-wetting impairment substances), conforms to RoHS	-

Quarter turn actuators DAPS with handwheel, double-acting

Technical data

FESTO

Actual torque [Nm] as a function of operating pressure [bar] and swivel angle [°]									
Size	Swivel angle [°]	Operating pressure [bar]							
		2.5	3	4	5	5.6	6	7	8
DAPS-0106	0°	47.3	56.8	75.7	94.6	106	113.6	132.5	151.4
	50°	23.7	28.4	37.9	47.3	53	56.8	66.3	75.7
	90°	35.7	72.9	57.1	71.4	80	85.7	100	114.3
DAPS-0180	0°	80.4	96.4	128.6	160.7	180	192.9	225	257.1
	50°	40.2	48.2	64.3	80.4	90	96.4	112.5	128.6
	90°	60.3	72.3	96.4	120.5	135	144.6	168.8	192.9
DAPS-0240	0°	107.1	128.6	171.4	214.3	240	257.1	300	342.9
	50°	53.6	64.3	85.7	107.1	120	128.6	150	171.4
	90°	80.4	96.4	128.6	160.7	180	192.9	225	257.1
DAPS-0360	0°	160.7	192.9	257.1	321.4	360	385.7	450	514.3
	50°	80.4	96.4	128.6	160.7	180	192.9	225	257.1
	90°	120.5	144.6	192.9	241.1	270	289.3	337.5	385.7
DAPS-0480	0°	214.3	257.1	342.9	428.6	480	514.3	600	685.7
	50°	107.1	128.6	171.4	214.3	240	257.1	300	342.9
	90°	160.7	192.9	257.1	321.4	360	385.7	450	514.3
DAPS-0720	0°	321.4	385.7	514.3	642.9	720	771.4	900	1,028.6
	50°	160.7	192.9	257.1	321.4	360	385.7	450	514.3
	90°	241.1	289.3	385.7	482.1	540	578.6	675	771.4
DAPS-0960	0°	428.6	514.3	685.7	857.1	960	1,028.6	1,200	1,371.4
	50°	214.3	257.1	342.9	428.6	480	514.3	600	685.7
	90°	321.4	385.7	514.3	642.9	720	771.4	900	1,028.6
DAPS-1440	0°	642.9	771.4	1,028.6	1,285.7	1,440	1,542.9	1,800	2,057.1
	50°	321.4	385.7	514.3	642.9	720	771.4	900	1,028.6
	90°	482.1	578.6	771.4	964.3	1,080	1,157.1	1,350	1,542.9
DAPS-1920	0°	857.1	1,028.6	1,371.4	1,714.3	1,920	2,057.1	2,400	2,742.9
	50°	428.6	514.3	685.7	857.1	960	1,028.6	1,200	1,371.4
	90°	642.9	771.4	1,028.6	1,285.7	1,440	1,542.9	1,800	2,057.1

Torque for size at 5.6 bar and swivel angle 0°

New
DAPS with handwheel

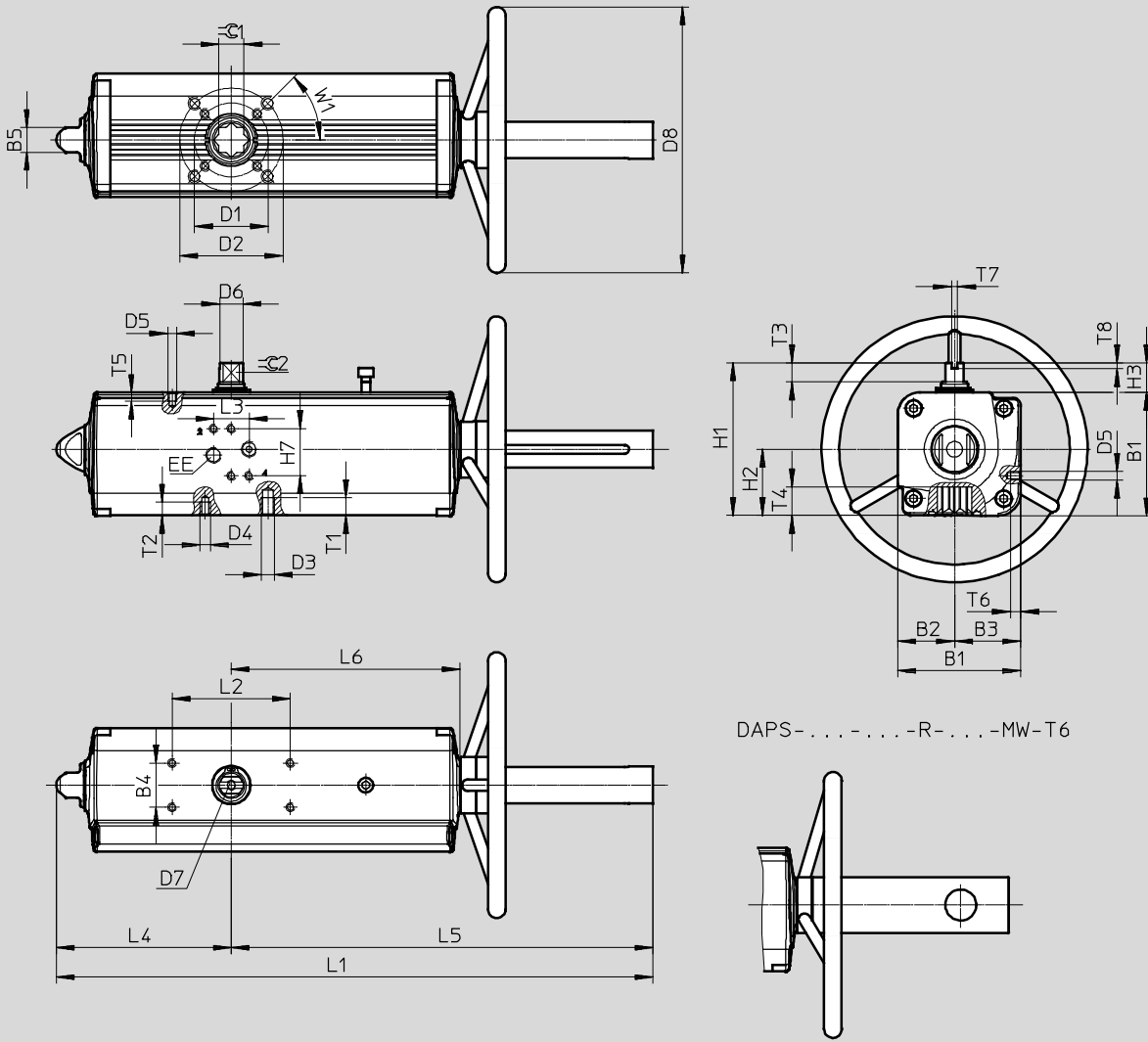
Quarter turn actuators DAPS with handwheel, double-acting

Technical data



Dimensions

Download CAD data → www.festo.com



Quarter turn actuators DAPS with handwheel, double-acting

FESTO

Technical data

Size	B1 ±0.4	B2	B3	B4	B5	D1 ∅	D2 ∅	D3	D4	D5	D6 ∅	D7
DAPS-0106-...-F0507-...	83.3	38.5	44.8	30	17	50	70	M8	M6	M5	16.2	M6x12
DAPS-0180-...-F0710-...	107.5	51	56.5	30	22	70	102	M10	M8	M5	20.2	M6x12
DAPS-0240-...-F0710-...	111.1	51	60.1	30	22	70	102	M10	M8	M5	22.5	M6x12
DAPS-0360-...-F0710-...	118	56	62	30	22	70	102	M10	M8	M5	25.5	M6x12
DAPS-0480-...-F1012-...	134.9	62	72.9	30	27	102	125	M12	M10	M5	29	M6x12
DAPS-0720-...-F1012-...	148	69.5	78.5	30	27	102	125	M12	M10	M5	31.8	M6x12
DAPS-0960-...-F1012-...	168	74.5	93.5	30	27	102	125	M12	M10	M5	36.5	M6x12
DAPS-0960-...-F14-...	168	74.5	93.5	30	27	-	140	M16	-	M5	36.5	M6x12
DAPS-1440-...-F12-...	186	84.5	101.5	30	36	-	125	M12	-	M5	41	M6x12
DAPS-1440-...-F14-...	186	84.5	101.5	30	36	-	140	M16	-	M5	41	M6x12
DAPS-1920-...-F14-...	207.7	93	114.7	30	36	-	140	M16	-	M5	46	M6x12
DAPS-1920-...-F1216-...	207.7	93	114.7	30	36	125	165	M20	M12	M5	46	M6x12

Size	D8 ∅	EE	H1	H2	H3	H7	L1 ±2	L2	L3	L4	L5	L6
DAPS-0106-...-F0507-...	180	G $\frac{1}{8}$	103.3	44.8	20±0.4	32	403.9	80	24	118.5	285.4	154.8
DAPS-0180-...-F0710-...	220	G $\frac{1}{8}$	137.5	56.5	30±0.4	32	493.2	80	24	144.9	348.3	183.5
DAPS-0240-...-F0710-...	220	G $\frac{1}{8}$	141.1	60.1	30±0.4	32	520.6	80	24	156.8	363.9	199.1
DAPS-0360-...-F0710-...	300	G $\frac{1}{8}$	148	62	30±0.4	32	578.8	80	24	169.6	409.1	220.8
DAPS-0480-...-F1012-...	300	G $\frac{1}{4}$	164.9	72.9	30±0.4	32	618.8	80	24	193.8	425	236.4
DAPS-0720-...-F1012-...	350	G $\frac{1}{4}$	178	78.5	30±0.4	32	732.8	80	24	216.6	516.2	282.3
DAPS-0960-...-F1012-...	350	G $\frac{1}{4}$	198	93.5	30±0.5	32	770.2	80	24	239.7	530.5	297.1
DAPS-0960-...-F14-...	350	G $\frac{1}{4}$	198	93.5	30±0.5	32	770.2	80	24	239.7	530.5	297.1
DAPS-1440-...-F12-...	400	G $\frac{1}{4}$	216	101.5	30±0.5	32	936.9	80	24	283.5	653.4	365.6
DAPS-1440-...-F14-...	400	G $\frac{1}{4}$	216	101.5	30±0.5	32	936.9	80	24	283.5	653.4	365.6
DAPS-1920-...-F14-...	400	G $\frac{1}{4}$	237.7	114.7	30±0.8	32	970.3	80	24	300.4	670	382.9
DAPS-1920-...-F1216-...	400	G $\frac{1}{4}$	237.7	114.7	30±0.8	32	970.3	80	24	300.4	670	382.9

Size	T1	T2	T3	T4	T5	T6	T7 +0.1	T8 +0.3	≈C 1 H11	≈C 2 h11	W1
DAPS-0106-...-F0507-...	12	9	13	19.3±0.4	6	7	4	4	17	12	45°
DAPS-0180-...-F0710-...	15	12	16	24.8±0.4	6	7	4	4	22	15	45°
DAPS-0240-...-F0710-...	15	12	17	24.8±0.4	6	7	4	4	22	15	45°
DAPS-0360-...-F0710-...	15	12	19	24.3±0.4	6	7	4	4	22	19	45°
DAPS-0480-...-F1012-...	18	15	19	29.5±0.4	6	7	4	4	27	19	45°
DAPS-0720-...-F1012-...	18	15	19.5	29.5±0.4	6	7	4	4	27	22	45°
DAPS-0960-...-F1012-...	18	15	19.5	38.5±0.5	6	7	4	4	36	24	45°
DAPS-0960-...-F14-...	24	-	19.5	38.5±0.5	6	7	4	4	36	24	45°
DAPS-1440-...-F12-...	18	-	19.5	38.5±0.5	6	7	4	4	36	27	45°
DAPS-1440-...-F14-...	24	-	19.5	38.5±0.5	6	7	4	4	36	27	45°
DAPS-1920-...-F14-...	24	-	18.5	48.5±0.8	6	7	4	4	46	32	45°
DAPS-1920-...-F1216-...	30	18	18.5	48.5±0.8	6	7	4	4	46	32	45°

Quarter turn actuators DAPS with handwheel, double-acting

Technical data

Ordering data – Double-acting		Ordering data – Double-acting	
Part No.	Type	Part No.	Type
Size 0106		Size 0960	
8005002	DAPS-0106-090-R-F0507-MW	8005008	DAPS-0960-090-R-F1012-MW
		8005009	DAPS-0960-090-R-F14-MW
Size 0180		Size 1440	
8005003	DAPS-0180-090-R-F0710-MW	8005010	DAPS-1440-090-R-F12-MW
		8005011	DAPS-1440-090-R-F14-MW
Size 0240		Size 1920	
8005004	DAPS-0240-090-R-F0710-MW	8005013	DAPS-1920-090-R-F1216-MW
		8005012	DAPS-1920-090-R-F14-MW
Size 0360			
8005005	DAPS-0360-090-R-F0710-MW		
Size 0480			
8005006	DAPS-0480-090-R-F1012-MW		
Size 0720			
8005007	DAPS-0720-090-R-F1012-MW		

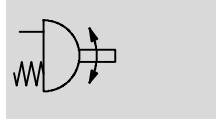
Ordering data – Double-acting T6		Ordering data – Double-acting T6	
Part No.	Type	Part No.	Type
Size 0106		Size 0960	
8005014	DAPS-0106-090-R-F0507-MW-T6	8005020	DAPS-0960-090-R-F1012-MW-T6
		8005021	DAPS-0960-090-R-F14-MW-T6
Size 0180		Size 1440	
8005015	DAPS-0180-090-R-F0710-MW-T6	8005022	DAPS-1440-090-R-F12-MW-T6
		8005023	DAPS-1440-090-R-F14-MW-T6
Size 0240		Size 1920	
8005016	DAPS-0240-090-R-F0710-MW-T6	8005024	DAPS-1920-090-R-F14-MW-T6
		8005025	DAPS-1920-090-R-F1216-MW-T6
Size 0360			
8005017	DAPS-0360-090-R-F0710-MW-T6		
Size 0480			
8005018	DAPS-0480-090-R-F1012-MW-T6		
Size 0720			
8005019	DAPS-0720-090-R-F1012-MW-T6		


Quarter turn actuators DAPS with handwheel, single-acting

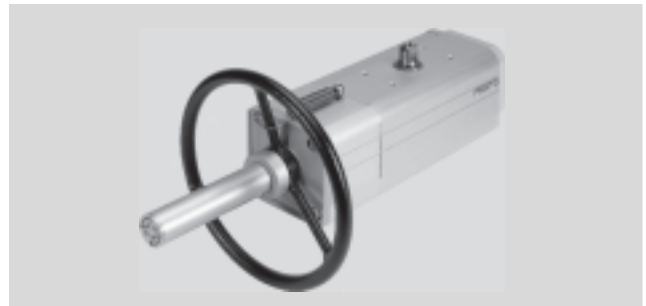
FESTO


Technical data


Function



 Swivel angle
0 ... 90°



 Size
0053 ... 0960

 Torque
0053 ... 0960 Nm

General technical data					
Size	0053	0090	0120	0180	0240
Pneumatic connection	G $\frac{1}{8}$				G $\frac{1}{4}$
Shaft connection depth [mm]	19.3	24.8	24.8	24.3	29.5
End-position adjusting range at 0°	-1 ... 9				
End-position adjusting range at 90°	-81 ... 91				
Note regarding the end-position adjusting range	Optionally one end position adjustable				
Design	Scotch yoke system				
Mode of operation	Single-acting				
Mounting position	Any				
Position sensing	None				
Cushioning	No cushioning				
Swivel angle [°]	90				
Closing direction	Closes to the right				

Size	0360	0480	0720	0960
Pneumatic connection	G $\frac{1}{4}$			
Shaft connection depth [mm]	29.5	38.5	38.5	48.5
End-position adjusting range at 0°	-1 ... 9			
End-position adjusting range at 90°	-81 ... 91			
Note regarding the end-position adjusting range	Optionally one end position adjustable			
Design	Scotch yoke system			
Mode of operation	Single-acting			
Mounting position	Any			
Position sensing	None			
Cushioning	No cushioning			
Swivel angle [°]	90			
Closing direction	Closes to the right			

Quarter turn actuators DAPS with handwheel, single-acting

FESTO

Technical data

Operating and environmental conditions		0053	0090	0120	0180	0240
Size						
Nominal operating pressure	[bar]	5.6				
Operating medium		Compressed air in accordance with ISO 8573-1:2010 [7:4:4]				
Note on operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)				
Ambient temperature	[°C]	-20 ... 80				
Corrosion resistance class CRC ¹⁾		2				
Connection to process valve as per standard		ISO 5211				
Valve connection conforms to standard		VDI/VDE 3845 (NAMUR)				

Operating and environmental conditions		0360	0480	0720	0960
Size					
Nominal operating pressure	[bar]	5.6			
Operating medium		Compressed air in accordance with ISO 8573-1:2010 [7:4:4]			
Note on operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)			
Ambient temperature	[°C]	-20 ... 80			
Corrosion resistance class CRC ¹⁾		2			
Connection to process valve as per standard		ISO 5211			
Valve connection conforms to standard		VDI/VDE 3845 (NAMUR)			

1) Corrosion resistance class 2 according to Festo standard 940 070

Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

ATEX	
ATEX category for gas	II 2G
Explosion ignition protection type for gas	c TX X
ATEX category for dust	II 2D
Explosion ignition protection type for dust	c TX X
Explosion-proof temperature	-20 °C ≤ Ta ≤ +60 °C
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

Materials		
Quarter turn actuators		Material number
Housing	Wrought aluminium alloy	-
Cover	Wrought aluminium alloy	-
Shaft	High-alloy steel	1.4305
External screws	High-alloy steel	-
Seals	FPM, NBR, PUR	-
Note on materials	Conforms to RoHS	-

Quarter turn actuators DAPS with handwheel, single-acting

FESTO

Technical data

Pressure ranges [bar]			Type		
Type	Connection pressure	Operating pressure	Type	Connection pressure	Operating pressure
Size 0053			Size 0480		
DAPS-0053-090-RS1-F0507-MW	2.8	2.8 ... 8.4	DAPS-0480-090-RS1-F1012-MW	2.8	2.8 ... 8.4
DAPS-0053-090-RS2-F0507-MW	3.5	3.5 ... 8.4	DAPS-0480-090-RS1-F14-MW	2.8	2.8 ... 8.4
DAPS-0053-090-RS3-F0507-MW	4.2	4.2 ... 8.4	DAPS-0480-090-RS2-F1012-MW	3.5	3.5 ... 8.4
DAPS-0053-090-RS4-F0507-MW	5.6	5.6 ... 8.4	DAPS-0480-090-RS2-F14-MW	3.5	3.5 ... 8.4
Size 0090			Size 0720		
DAPS-0090-090-RS1-F0710-MW	2.8	2.8 ... 8.4	DAPS-0720-090-RS1-F12-MW	2.8	2.8 ... 8.4
DAPS-0090-090-RS2-F0710-MW	3.5	3.5 ... 8.4	DAPS-0720-090-RS1-F14-MW	2.8	2.8 ... 8.4
DAPS-0090-090-RS3-F0710-MW	4.2	4.2 ... 8.4	DAPS-0720-090-RS2-F12-MW	3.5	3.5 ... 8.4
DAPS-0090-090-RS4-F0710-MW	5.6	5.6 ... 8.4	DAPS-0720-090-RS2-F14-MW	3.5	3.5 ... 8.4
Size 0120			Size 0960		
DAPS-0120-090-RS1-F0710-MW	2.8	2.8 ... 8.4	DAPS-0960-090-RS1-F1216-MW	2.8	2.8 ... 8.4
DAPS-0120-090-RS2-F0710-MW	3.5	3.5 ... 8.4	DAPS-0960-090-RS1-F14-MW	2.8	2.8 ... 8.4
DAPS-0120-090-RS3-F0710-MW	4.2	4.2 ... 8.4	DAPS-0960-090-RS2-F1216-MW	3.5	3.5 ... 8.4
DAPS-0120-090-RS4-F0710-MW	5.6	5.6 ... 8.4	DAPS-0960-090-RS2-F14-MW	3.5	3.5 ... 8.4
Size 0180			Size 0960		
DAPS-0180-090-RS1-F0710-MW	2.8	2.8 ... 8.4	DAPS-0960-090-RS3-F1216-MW	4.2	4.2 ... 8.4
DAPS-0180-090-RS2-F0710-MW	3.5	3.5 ... 8.4	DAPS-0960-090-RS3-F14-MW	4.2	4.2 ... 8.4
DAPS-0180-090-RS3-F0710-MW	4.2	4.2 ... 8.4	DAPS-0960-090-RS4-F1216-MW	5.6	5.6 ... 8.4
DAPS-0180-090-RS4-F0710-MW	5.6	5.6 ... 8.4	DAPS-0960-090-RS4-F14-MW	5.6	5.6 ... 8.4
Size 0240			Size 0360		
DAPS-0240-090-RS1-F1012-MW	2.8	2.8 ... 8.4	DAPS-0360-090-RS1-F1012-MW	2.8	2.8 ... 8.4
DAPS-0240-090-RS2-F1012-MW	3.5	3.5 ... 8.4	DAPS-0360-090-RS2-F1012-MW	3.5	3.5 ... 8.4
DAPS-0240-090-RS3-F1012-MW	4.2	4.2 ... 8.4	DAPS-0360-090-RS3-F1012-MW	4.2	4.2 ... 8.4
DAPS-0240-090-RS4-F1012-MW	5.6	5.6 ... 8.4	DAPS-0360-090-RS4-F1012-MW	5.6	5.6 ... 8.4

Air consumption [l/cycle 0°-90°-0°] at 6 bar		Size	
0053	1.8	0360	12
0090	3.3	0480	16.8
0120	4.8	0720	25.2
0180	6	0960	35.4
0240	9		

Weight [g]		Size	
0053	4,500	0360	19,500
0090	6,800	0480	28,100
0120	9,000	0720	38,800
0180	11,700	0960	50,600
0240	15,200		

Quarter turn actuators DAPS with handwheel, single-acting

Technical data

Actual torque [Nm] as a function of operating pressure [bar], spring strength and swivel angle [°]																		
Spring strength	Spring torque [Nm]			Operating pressure [bar]														
				2.5			2.8			3			3.5			4.2		
	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°
DAPS-0053																		
1	17.5	13	26.5	20.2	9.3	11.2	26.5	13	17.5	29.6	14.9	20.6	37.5	19.5	28.5	48.5	26	39.5
2	22	16.5	33	-	-	-	-	-	-	25.1	11.8	14.1	33	16.5	22	44	23.1	33
3	26	19.5	40	-	-	-	-	-	-	-	-	-	29	13	15	40	19.5	26
4	35	26	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0090																		
1	30	22.5	45	34.3	16.1	19.3	45	22.5	30	50.4	25.7	35.4	63.8	33.8	48.8	82.5	45	67.5
2	37.5	28.1	56.3	-	-	-	-	-	-	42.9	20.1	24.1	56.3	28.1	37.5	75.1	39.4	56.3
3	45	33.9	67.5	-	-	-	-	-	-	-	-	-	48.8	22.6	26.3	67.5	33.9	45
4	60	45	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0120																		
1	40	30	60	45.7	21.4	25.7	60	30	40	67.1	34.3	47.1	85	45	65	110	60	90
2	50	37.5	75	-	-	-	-	-	-	57.1	26.8	32.1	75	37.5	50	100	52.5	75
3	60	45	90	-	-	-	-	-	-	-	-	-	65	30	35	90	45	60
4	80	60	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0180																		
1	60	45	90	68.6	32.1	38.6	90	45	60	100.7	51.4	70.7	127.5	67.5	97.5	165	90	135
2	75	56.3	112.5	-	-	-	-	-	-	85.7	40.2	48.2	112.5	56.3	75	150	78.8	112.5
3	90	67.5	135	-	-	-	-	-	-	-	-	-	97.5	45	52.5	135	67.5	90
4	120	90	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0240																		
1	80	60	120	91.4	42.9	51.4	120	60	80	134.3	68.6	94.3	170	90	130	220	120	180
2	100	75	150	-	-	-	-	-	-	114.3	53.6	64.3	150	75	100	200	105	150
3	120	90	180	-	-	-	-	-	-	-	-	-	130	60	70	180	90	120
4	160	120	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Quarter turn actuators DAPS with handwheel, single-acting

FESTO

Technical data

Actual torque [Nm] as a function of operating pressure [bar], spring strength and swivel angle [°]																		
Spring strength	Spring torque [Nm]			Operating pressure [bar]														
				5			5.6			6			7			8		
	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°
DAPS-0053																		
1	17.5	13	26.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	22	16.5	33	56.6	30.6	45.6	66	36.3	55	–	–	–	–	–	–	–	–	–
3	26	19.5	40	52.6	26.9	38.6	62	32.5	48	68.3	36.2	54.3	84	45.5	70	99.7	54.8	85.7
4	35	26	53	43.6	20.4	25.6	53	26	35	59.3	29.7	41.3	75	39	57	90.7	48.3	72.7
DAPS-0090																		
1	30	22.5	45	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	37.5	28.1	56.3	96.5	52.2	77.7	112.6	61.9	93.8	–	–	–	–	–	–	–	–	–
3	45	33.9	67.5	88.9	46.8	66.4	105	56.5	82.5	115.7	63	93.2	142.5	79.1	120	169.3	95.2	146.8
4	60	45	90	73.9	35.4	43.9	90	45	60	100.7	51.4	70.7	127.5	67.5	97.5	154.3	83.6	124.3
DAPS-0120																		
1	40	30	60	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	50	37.5	75	128.6	69.6	103.6	150	82.5	125	–	–	–	–	–	–	–	–	–
3	60	45	90	118.6	62.1	88.6	140	75	110	154.3	83.6	124.3	190	105	160	225.7	126.4	195.7
4	80	60	120	98.6	47.1	58.6	120	60	80	134.3	68.6	94.3	170	90	130	205.7	111.4	165.7
DAPS-0180																		
1	60	45	90	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	75	56.3	112.5	192.9	104.5	155.4	225	123.8	187.5	–	–	–	–	–	–	–	–	–
3	90	67.5	135	177.9	93.2	132.9	210	112.5	165	231.4	125.4	186.4	285	157.5	240	338.6	189.6	293.6
4	120	90	180	147.9	70.7	87.9	180	90	120	201.4	102.9	141.4	255	135	195	308.6	167.1	248.6
DAPS-0240																		
1	80	60	120	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	100	75	150	257.1	139.3	207.1	300	165	250	–	–	–	–	–	–	–	–	–
3	120	90	180	237.1	124.3	177.1	280	150	220	308.6	167.1	248.6	380	210	320	451.4	252.9	391.4
4	160	120	240	197.1	94.3	117.1	240	120	160	268.6	137.1	188.6	340	180	260	411.4	222.9	331.4

Torque for size at 5.6 bar and swivel angle 0°

Quarter turn actuators DAPS with handwheel, single-acting

Technical data

Actual torque [Nm] as a function of operating pressure [bar], spring strength and swivel angle [°]																		
Spring strength	Spring torque [Nm]			Operating pressure [bar]														
				2.5			2.8			3			3.5			4.2		
	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°
DAPS-0360																		
1	120	90	180	137.1	64.3	77.1	180	90	120	201.4	102.9	141.4	255	135	195	330	180	270
2	150	112.5	225	-	-	-	-	-	-	171.4	80.4	96.4	225	112.5	150	300	157.5	225
3	180	135	270	-	-	-	-	-	-	-	-	-	195	90	105	270	135	180
4	240	180	360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0480																		
1	160	120	240	182.9	85.7	102.9	240	120	160	268.6	137.1	188.6	340	180	260	440	240	360
2	200	150	300	-	-	-	-	-	-	228.6	107.1	128.6	300	150	200	400	210	300
3	240	180	360	-	-	-	-	-	-	-	-	-	260	120	140	360	180	240
4	320	240	480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0720																		
1	240	180	360	274.3	128.6	154.3	360	180	240	402.9	205.7	282.9	510	270	390	660	360	540
2	300	225	450	-	-	-	-	-	-	342.9	160.7	192.9	450	225	300	600	315	450
3	360	270	540	-	-	-	-	-	-	-	-	-	390	180	210	540	270	360
4	480	360	720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAPS-0960																		
1	320	240	480	366	171	206	480	240	320	537	274	377	680	360	520	880	480	720
2	400	300	600	-	-	-	-	-	-	457	214	257	600	300	400	800	420	600
3	480	360	720	-	-	-	-	-	-	-	-	-	520	240	280	720	360	480
4	640	480	960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Quarter turn actuators DAPS with handwheel, single-acting

FESTO

Technical data

Actual torque [Nm] as a function of operating pressure [bar], spring strength and swivel angle [°]																		
Spring strength	Spring torque [Nm]			Operating pressure [bar]														
				5			5.6			6			7			8		
	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°
DAPS-0360																		
1	120	90	180	–			–			–			–			–		
2	150	112.5	225	385.7	208.9	310.7	450	247.5	375	–			–			–		
3	180	135	270	355.7	186.4	265.7	420	225	330	462.9	250.7	372.9	570	315	480	677.1	379.3	587.1
4	240	180	360	295.7	141.4	175.7	360	180	240	402.9	205.7	282.9	510	270	390	617.1	334.3	497.1
DAPS-0480																		
1	160	120	240	–			–			–			–			–		
2	200	150	300	514.3	278.6	414.3	600	330	500	–			–			–		
3	240	180	360	474.3	248.6	354.3	560	300	440	617.1	334.3	497.1	760	420	640	902.9	505.7	782.9
4	320	240	480	394.3	188.6	234.3	480	240	320	537.1	274.3	377.1	680	360	520	822.9	445.7	662.9
DAPS-0720																		
1	240	180	360	–			–			–			–			–		
2	300	225	450	771.4	417.9	621.4	900	495	750	–			–			–		
3	360	270	540	711.4	372.9	531.4	840	450	660	925.7	501.4	745.7	1,140	630	960	1,354	758.6	1,174
4	480	360	720	591.4	282.9	351.4	720	360	480	805.7	411.4	565.7	1,020	540	780	1,234	668.6	994.3
DAPS-0960																		
1	320	240	480	–			–			–			–			–		
2	400	300	600	1,029	557	829	1,200	660	1,000	–			–			–		
3	480	360	720	949	497	709	1,120	600	880	1,234	669	994	1,520	840	1,280	1,806	1,011	1,566
4	640	480	960	789	377	469	960	480	640	1,074	549	754	1,360	720	1,040	1,646	891	1,326

Torque for size at 5.6 bar and swivel angle 0°

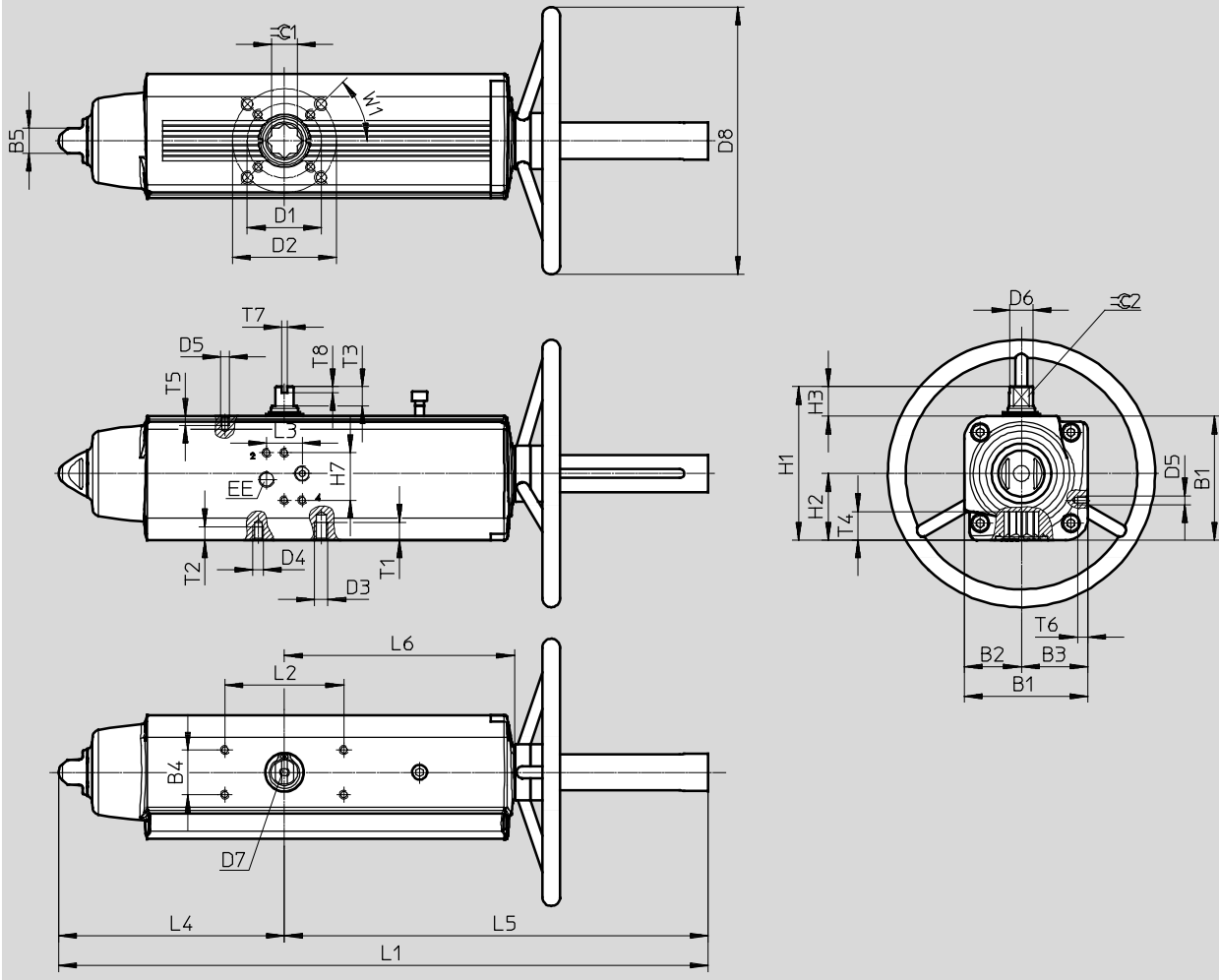
Quarter turn actuators DAPS with handwheel, single-acting

Technical data

FESTO

Dimensions

Download CAD data → www.festo.com



Quarter turn actuators DAPS with handwheel, single-acting

FESTO

Technical data

Size	B1 ±0.4	B2	B3	B4	B5	D1 ∅	D2 ∅	D3	D4	D5	D6 ∅	D7
DAPS-0053-...-F0507-...	83.3	38.5	44.8	30	17	50	70	M8	M6	M5	16.2	M6x12
DAPS-0090-...-F0710-...	107.5	51	56.5	30	22	70	102	M10	M8	M5	20.2	M6x12
DAPS-0120-...-F0710-...	111.1	51	60.1	30	22	70	102	M10	M8	M5	22.5	M6x12
DAPS-0180-...-F0710-...	118	56	62	30	22	70	102	M10	M8	M5	25.5	M6x12
DAPS-0240-...-F1012-...	134.9	62	72.9	30	27	102	125	M12	M10	M5	29	M6x12
DAPS-0360-...-F1012-...	148	69.5	78.5	30	27	102	125	M12	M10	M5	31.8	M6x12
DAPS-0480-...-F1012-...	168	74.5	93.5	30	27	102	125	M12	M10	M5	36.5	M6x12
DAPS-0480-...-F14-...	168	74.5	93.5	30	27	-	140	M16	-	M5	36.5	M6x12
DAPS-0720-...-F12-...	186	84.5	101.5	30	36	-	125	M12	-	M5	41	M6x12
DAPS-0720-...-F14-...	186	84.5	101.5	30	36	-	140	M16	-	M5	41	M6x12
DAPS-0960-...-F14-...	207.7	93	114.7	30	36	-	140	M16	-	M5	46	M6x12
DAPS-0960-...-F1216-...	207.7	93	114.7	30	36	125	165	M20	M12	M5	46	M6x12

Size	D8 ∅	EE	H1	H2	H3	H7	L1 ±2	L2	L3	L4	L5	L6
DAPS-0053-...-F0507-...	180	G $\frac{1}{8}$	103.3	44.8	20±0.4	32	437.5	80	24	152.1	285.4	154.8
DAPS-0090-...-F0710-...	220	G $\frac{1}{8}$	137.5	56.5	30±0.4	32	545.1	80	24	196.8	348.3	183.5
DAPS-0120-...-F0710-...	220	G $\frac{1}{8}$	141.1	60.1	30±0.4	32	568.6	80	24	204.8	363.9	199.1
DAPS-0180-...-F0710-...	300	G $\frac{1}{8}$	148	62	30±0.4	32	646.1	80	24	237	409.1	220.8
DAPS-0240-...-F1012-...	300	G $\frac{1}{4}$	164.9	72.9	30±0.4	32	685.2	80	24	260.2	425	236.4
DAPS-0360-...-F1012-...	350	G $\frac{1}{4}$	178	78.5	30±0.4	32	822.8	80	24	306.6	516.2	282.3
DAPS-0480-...-F1012-...	350	G $\frac{1}{4}$	198	93.5	30±0.5	32	854.6	80	24	324.1	530.5	297.1
DAPS-0480-...-F14-...	350	G $\frac{1}{4}$	198	93.5	30±0.5	32	854.6	80	24	324.1	530.5	297.1
DAPS-0720-...-F12-...	400	G $\frac{1}{4}$	216	101.5	30±0.5	32	1,052.4	80	24	399	653.4	365.6
DAPS-0720-...-F14-...	400	G $\frac{1}{4}$	216	101.5	30±0.5	32	1,052.4	80	24	399	653.4	365.6
DAPS-0960-...-F14-...	400	G $\frac{1}{4}$	237.7	114.7	30±0.8	32	1,084	80	24	414	670	382.9
DAPS-0960-...-F1216-...	400	G $\frac{1}{4}$	237.7	114.7	30±0.8	32	1,084	80	24	414	670	382.9

Size	T1	T2	T3	T4	T5	T6	T7 +0.1	T8 +0.3	≈C 1 H11	≈C 2 h11	W1
DAPS-0053-...-F0507-...	12	9	13	19.3±0.4	6	7	4	4	17	12	45°
DAPS-0090-...-F0710-...	15	12	16	24.8±0.4	6	7	4	4	22	15	45°
DAPS-0120-...-F0710-...	15	12	17	24.8±0.4	6	7	4	4	22	15	45°
DAPS-0180-...-F0710-...	15	12	19	24.3±0.4	6	7	4	4	22	19	45°
DAPS-0240-...-F1012-...	18	15	19	29.5±0.4	6	7	4	4	27	19	45°
DAPS-0360-...-F1012-...	18	15	19.5	29.5±0.4	6	7	4	4	27	22	45°
DAPS-0480-...-F1012-...	18	15	19.5	38.5±0.5	6	7	4	4	36	24	45°
DAPS-0480-...-F14-...	24	-	19.5	38.5±0.5	6	7	4	4	36	24	45°
DAPS-0720-...-F12-...	18	-	19.5	38.5±0.5	6	7	4	4	36	27	45°
DAPS-0720-...-F14-...	24	-	19.5	38.5±0.5	6	7	4	4	36	27	45°
DAPS-0960-...-F14-...	24	-	18.5	48.5±0.8	6	7	4	4	46	32	45°
DAPS-0960-...-F1216-...	30	18	18.5	48.5±0.8	6	7	4	4	46	32	45°

Quarter turn actuators DAPS with handwheel, single-acting

Technical data

Ordering data – Single-acting		Ordering data – Single-acting	
Part No.	Type	Part No.	Type
Size 0053		Size 0480	
8005026	DAPS-0053-090-RS1-F0507-MW	8005050	DAPS-0480-090-RS1-F1012-MW
8005027	DAPS-0053-090-RS2-F0507-MW	8005051	DAPS-0480-090-RS1-F14-MW
8005028	DAPS-0053-090-RS3-F0507-MW	8005052	DAPS-0480-090-RS2-F1012-MW
8005029	DAPS-0053-090-RS4-F0507-MW	8005053	DAPS-0480-090-RS2-F14-MW
Size 0090		Size 0720	
8005030	DAPS-0090-090-RS1-F0710-MW	8005054	DAPS-0480-090-RS3-F1012-MW
8005031	DAPS-0090-090-RS2-F0710-MW	8005055	DAPS-0480-090-RS3-F14-MW
8005032	DAPS-0090-090-RS3-F0710-MW	8005056	DAPS-0480-090-RS4-F1012-MW
8005033	DAPS-0090-090-RS4-F0710-MW	8005057	DAPS-0480-090-RS4-F14-MW
Size 0120		Size 0960	
8005034	DAPS-0120-090-RS1-F0710-MW	8005058	DAPS-0720-090-RS1-F12-MW
8005035	DAPS-0120-090-RS2-F0710-MW	8005059	DAPS-0720-090-RS1-F14-MW
8005036	DAPS-0120-090-RS3-F0710-MW	8005060	DAPS-0720-090-RS2-F12-MW
8005037	DAPS-0120-090-RS4-F0710-MW	8005061	DAPS-0720-090-RS2-F14-MW
Size 0180		Size 0960	
8005038	DAPS-0180-090-RS1-F0710-MW	8005062	DAPS-0720-090-RS3-F12-MW
8005039	DAPS-0180-090-RS2-F0710-MW	8005063	DAPS-0720-090-RS3-F14-MW
8005040	DAPS-0180-090-RS3-F0710-MW	8005064	DAPS-0720-090-RS4-F12-MW
8005041	DAPS-0180-090-RS4-F0710-MW	8005065	DAPS-0720-090-RS4-F14-MW
Size 0240		Size 0960	
8005042	DAPS-0240-090-RS1-F1012-MW	8005067	DAPS-0960-090-RS1-F1216-MW
8005043	DAPS-0240-090-RS2-F1012-MW	8005066	DAPS-0960-090-RS1-F14-MW
8005044	DAPS-0240-090-RS3-F1012-MW	8005069	DAPS-0960-090-RS2-F1216-MW
8005045	DAPS-0240-090-RS4-F1012-MW	8005068	DAPS-0960-090-RS2-F14-MW
Size 0360		Size 0960	
8005046	DAPS-0360-090-RS1-F1012-MW	8005071	DAPS-0960-090-RS3-F1216-MW
8005047	DAPS-0360-090-RS2-F1012-MW	8005070	DAPS-0960-090-RS3-F14-MW
8005048	DAPS-0360-090-RS3-F1012-MW	8005073	DAPS-0960-090-RS4-F1216-MW
8005049	DAPS-0360-090-RS4-F1012-MW	8005072	DAPS-0960-090-RS4-F14-MW

Quarter turn actuators DAPS

Accessories



Ordering data – Adapter kits for mounting the sensor boxes SRBP, SRAP										
	Size	Dimensions [mm]	CRC ¹⁾	Part No.	Type					
DAPS – Double-acting										
	DAPS-0015- ... -F03	20x30x80	3	568275	DASB-P1-HA-SB					
	DAPS-0015- ... -F04									
	DAPS-0030- ... -F0305									
	DAPS-0030- ... -F04									
	DAPS-0060- ... -F04									
	DAPS-0060- ... -F0507									
	DAPS-0106- ... -F0507									
	DAPS-0180- ... -F0710	30x30x80		572418	DASB-P1-HB-SB					
	DAPS-0240- ... -F0710									
	DAPS-0360- ... -F0710									
	DAPS-0480- ... -F1012									
	DAPS-0720- ... -F1012									
	DAPS-0960- ... -F12									
	DAPS-0960- ... -F14									
	DAPS-1440- ... -F12									
	DAPS-1440- ... -F14									
	DAPS-1920- ... -F14									
	DAPS-1920- ... -F1216									
						DAPS-2880- ... -F16	30x30x130		572419	DASB-P1-HC-SB
						DAPS-3840- ... -F16				
DAPS-5760- ... -F25										
DAPS-8000- ... -F25										

1) Corrosion resistance class 3 according to Festo standard 940 070
Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.

Ordering data – Adapter kits for mounting the sensor boxes SRBP, SRAP					
	Size	Dimensions [mm]	CRC ¹⁾	Part No.	Type
DAPS – Single-acting					
	DAPS-0015- ... -F0305	20x30x80	3	568275	DASB-P1-HA-SB
	DAPS-0015- ... -F04				
	DAPS-0030- ... -F04				
	DAPS-0030- ... -F0507				
	DAPS-0053- ... -F0507				
	DAPS-0090- ... -F0710	30x30x80		572418	DASB-P1-HB-SB
	DAPS-0120- ... -F0710				
	DAPS-0180- ... -F0710				
	DAPS-0240- ... -F1012				
	DAPS-0360- ... -F1012				
	DAPS-0480- ... -F12				
	DAPS-0480- ... -F14				
	DAPS-0720- ... -F12				
	DAPS-0720- ... -F14				
	DAPS-0960- ... -F14				
	DAPS-0960- ... -F1216				
	DAPS-1440- ... -F16	30x30x130		572419	DASB-P1-HC-SB
	DAPS-1920- ... -F16				
	DAPS-2880- ... -F16				
	DAPS-4000- ... -F25				

1) Corrosion resistance class 3 according to Festo standard 940 070
Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.