

ARI-DP30 / DP32 / DP33 / DP34

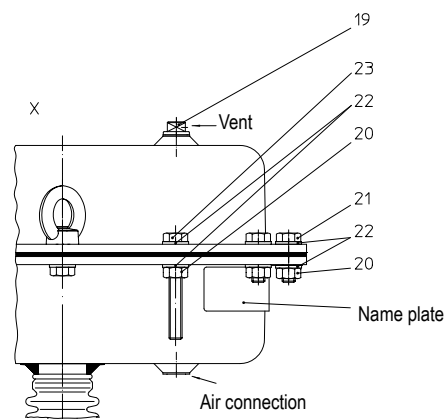
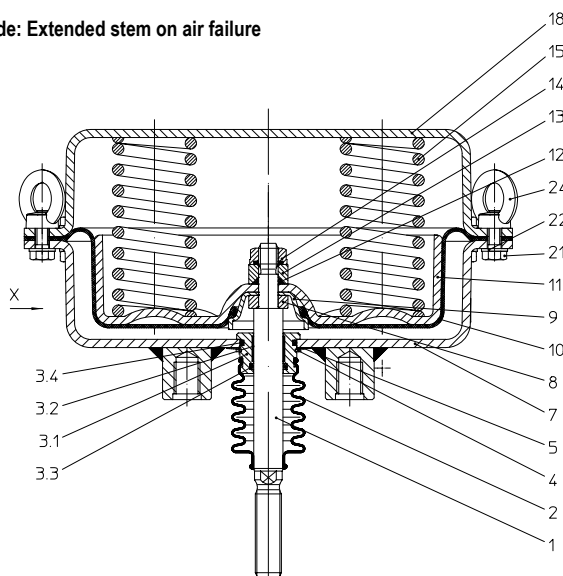
Pneumatic actuator ARI-DP



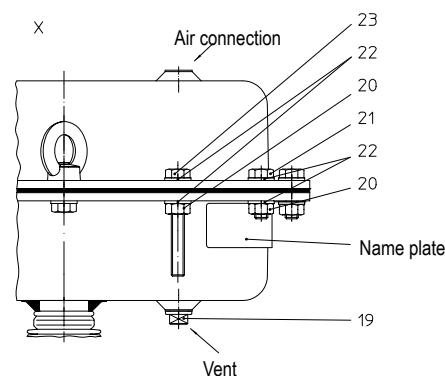
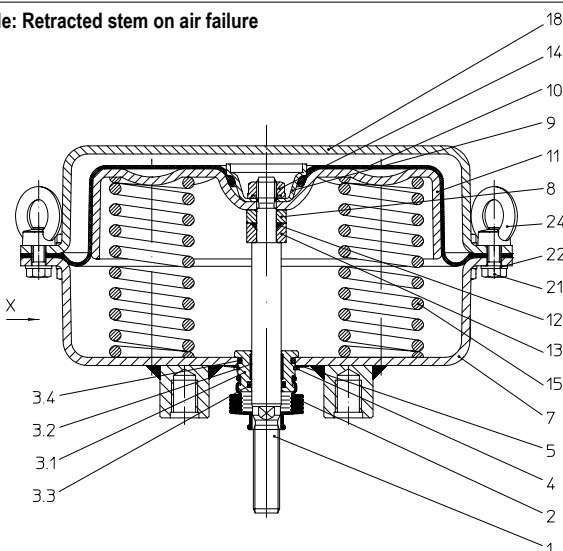
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Pneumatic actuator ARI-DP30 / 32 / 33 / 34

Operating mode: Extended stem on air failure



Operating mode: Retracted stem on air failure



Pos.	Sp.p.	Description	Material	
			Standard	C5-M
1		Stem	X20Cr13+QT, 1.4021+QT	1.4571
2		Bellow seal	EPDM50 or 42CR	
3.1	x	Stem guide	X20Cr13+QT, 1.4021+QT	1.4571
3.2	x	Guiding band	PTFE + 25%C	
3.3	x	O-ring (stem)	NBR	
3.4	x	O-ring (guiding)	NBR	
4	x	Retaining ring	FSt - A2B	A4
5	x	Spring plate	FSt (Fe/Zn8M)	1.4310
6 / 7		Lower diaphragm casing	DD13+QT, 1.0335+QT (powder coated)	DD13+QT, 1.0335+QT (C5-M coated)
8		Bushing	X20Cr13+QT, 1.4021+QT	
9		Diaphragm flange	DD13+QT, 1.0335+QT (Fe/Zn12B) or X20Cr13+QT, 1.4021+QT	
10	x	Diaphragm	NBR + Webbing	
11		Diaphragm plate	DD13+QT, 1.0335+QT (Fe/Zn12B)	

Pos.	Sp.p.	Description	Material	
			Standard	C5-M
12 ²⁾		O-ring	NBR	
13 ²⁾		Bushing	X20Cr13+QT, 1.4021+QT	
14	x	Collar nut with sealing ring	8-A2B	
15	x	Compression spring	FDSiCr	
16		Spring centring	DC01, 1.0330 (Fe/Zn12B)	
18		Upper diaphragm casing	DD13+QT, 1.0335+QT (powder coated)	DD13+QT, 1.0335+QT (C5-M coated)
19		Screw cap	Polyethylene	
20		Hexagon nut ¹⁾	8 - A2B	A4
21		Hexagon screw ¹⁾	8.8 - A2B	A4-70
22		Washer	St - A2B	A4
23		Hexagon screw ¹⁾	8.8 - A2B	A4-70
24		Eye nut ¹⁾	C15, 1.0401 - A2B	A4
L Spare parts				

¹⁾ Studs and nuts at temperatures below -10°C made of A4-70

²⁾ Not present in DP32



ARI-DP30 / DP32 / DP33 / DP34

Actuators thrust



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Operating mode	Type of actuator	Spring range	Air supply pressure min.	Thrust	Spring qty.	Travel 20 mm		Travel 30 mm		Travel 50 mm		Travel 65 mm	
						Dead volume	Travel-volume	Dead volume	Travel-volume	Dead volume	Travel-volume	Dead volume	Travel-volume
 Spring closes on air failure (stem extending by spring)	DP30 80 cm²	2,2 - 4,5	4,8	2000	1	0,17	0,17						
	DP32 250 cm²	0,2 - 1,0	1,2	490	4	0,5	0,5	0,5	0,7				
		0,4 - 1,2	1,4	980	4	0,6	0,5	0,7	0,7				
		0,8 - 2,4	2,7	1960	8	0,6	0,5	0,7	0,7				
		1,5 - 2,9	3,2	3675	6	0,5	0,5	--	--				
		2,0 - 3,8	4,1	4900	8	0,7	0,5	--	--				
	DP33 400 cm²	0,2 - 1,0	1,2	780	4	0,9	0,8	0,9	1,2				
		0,4 - 1,2	1,4	1560	4	1,1	0,8	1,2	1,2				
		0,8 - 2,4	2,7	3120	8	1,1	0,8	1,2	1,2				
		1,5 - 3,0	3,3	5850	6	--	--	1,0	1,2				
		1,7 - 2,7	3,1	6630	6	1,2	0,8	--	--				
		2,0 - 4,0	4,5	7800	8	--	--	1,0	1,2				
		2,3 - 3,7	4	8970	8	1,2	0,8	--	--				
		0,2 - 1,0	1,2	1570	4			1,4	2,4	1,6	3,9	1,8	5,1
	DP34 800 cm²	0,4 - 1,2	1,4	3140	4			2,0	2,4	2,7	3,9	3,1	5,1
		0,8 - 2,4	2,7	6280	8			2,0	2,4	2,7	3,9	--	--
		1,0 - 2,0	2,4	7850	4			--	--	--	--	1,7	5,1
		1,5 - 3,0	3,3	11775	6			--	--	3,0	3,9	--	--
		2,0 - 4,0	4,5	15700	8			--	--	3,0	3,9	1,7	5,1
		2,1 - 3,0	3,3	16485	6			4,5	2,4	--	--	--	--
		2,4 - 3,6	4	18840	8			3,7	2,4	--	--	--	--

Operating mode	Type of actuator	Spring range	Air supply pressure min.	Thrust	Spring qty.	Travel 20 mm		Travel 30 mm		Travel 50 mm		Travel 65 mm	
						Dead volume	Travel-volume	Dead volume	Travel-volume	Dead volume	Travel-volume	Dead volume	Travel-volume
 Spring opens on air failure (stem retracting by spring)	DP30 80 cm²	0,6 - 1,5	3	1400	1	0,2	0,17						
			4	2200	1	0,2	0,17						
			5	3000	1	0,2	0,17						
			6	3800	1	0,2	0,17						
	DP32 250 cm²	0,2 - 1,0	1,2	490	4	0,5	0,5	0,5	0,7				
			1,4	980	4	0,5	0,5	0,5	0,7				
			2	2450	4	0,5	0,5	0,5	0,7				
			3	4900	4	0,5	0,5	0,5	0,7				
			4	7350	4	0,5	0,5	0,5	0,7				
			5	9800	4	0,5	0,5	0,5	0,7				
			6	12250	4	0,5	0,5	0,5	0,7				
	DP33 400 cm²	0,2 - 1,0	1,2 ^{d)}	780	4	0,9	0,8	0,9	1,2				
			1,4 ^{d)}	1560	4	0,9	0,8	0,9	1,2				
			2 ^{d)}	3900	4	0,9	0,8	0,9	1,2				
			3 ^{d)}	7800	4	0,9	0,8	0,9	1,2				
			4	11700	4	0,9	0,8	0,9	1,2				
			5	15600	4	0,9	0,8	0,9	1,2				
			6	19500	4	0,9	0,8	0,9	1,2				
	DP34 800 cm²	0,2 - 1,0	1,2	1570	4			1,4	2,4	1,6	3,9	1,8	5,1
			1,4	3140	4			1,4	2,4	1,6	3,9	1,8	5,1
			2	7850	4			1,4	2,4	1,6	3,9	1,8	5,1
			3	15700	4			1,4	2,4	1,6	3,9	1,8	5,1
			4	23550	4			1,4	2,4	1,6	3,9	1,8	5,1
			5	31400	4			1,4	2,4	1,6	3,9	1,8	5,1
			6	39250	4			1,4	2,4	1,6	3,9	1,8	5,1

Air supply pressure max. to actuator: 6 bar Restriction: d) 3,5 bar

When using accessories, the corresponding air consumption has to be observed.



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0-2792-9333



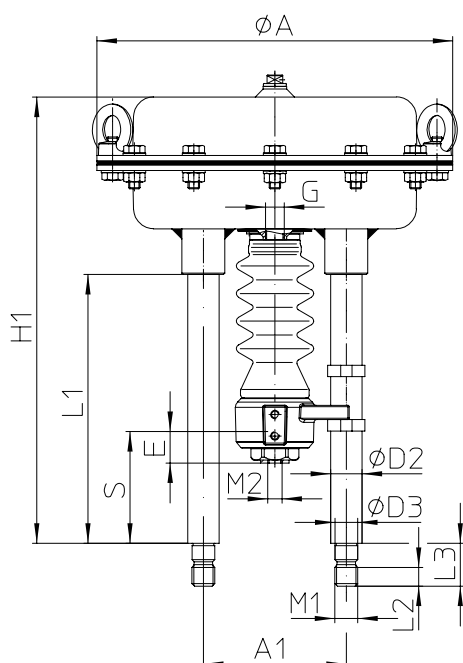
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ARI-DP30 / DP32 / DP33 / DP34

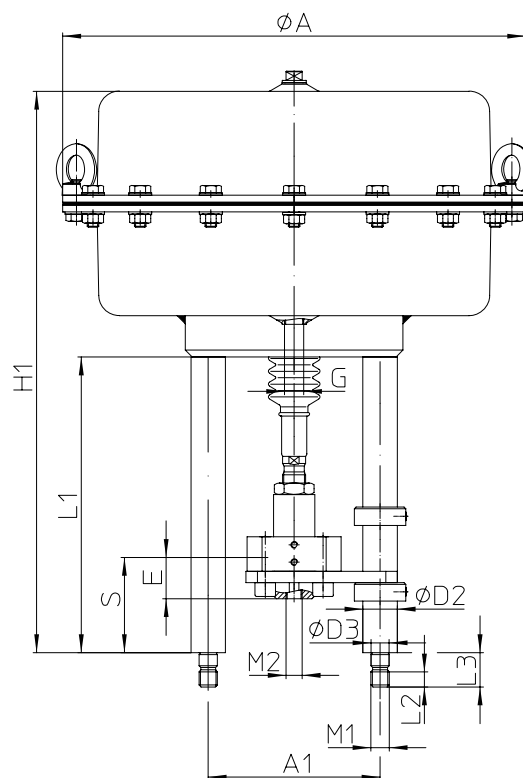
Dimensions and weights



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DP30 / 32 / DP33



DP34

Type of actuator		DP30	DP32				DP33					DP34											
		2-column mounting																					
Ø A	(mm)	168	250				300					405											
H1 *	(mm)	310	292	312	323	337	334	354	365	380	394	416	441	456	468	486	506	456	486	506	538	548	
L1 *	(mm)	188	168	188	199	213	168	188	199	213	228	188	213	228	240	258	278	228	258	278	310	320	
A1	(mm)	100	100				100					100						150					
Ø D2	(mm)	22	22				22					22						30					
M1	(mm)	M16	M16				M16					M16											
L2	(mm)	14	14				14					14 (19)											
L3	(mm)	30	30				30					30 (45)											
Ø D3	(mm)	16	16				16					16											
M2	(mm)	M10 / M12 / M14x1,5 / M16 / M16x1,5										M10 / M12 / M14x1,5 / M16 / M16x1,5						M16 / M20					
E max. (Screw-in depth)	(mm)	22 / 21 / 21 / 19 / 20										28						36					
G	(inch)	1/4"	1/4"				1/4"					3/8"											
Weight	(kg)	5	9				15					45											

* The construction heights H1 of the actuator units vary due to the different lengths of the distance columns L1, which results from the excess length of the stem (S = 83 mm, 98 mm, 130 mm), and the different spring ranges (bench settings) of the actuator units.



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Accessories

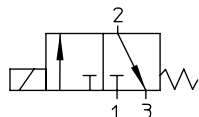


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3/2-way solenoid valves

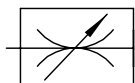
directly controlled with manual operating device

(Air is vented in the rest position
(incl. standard female connector)



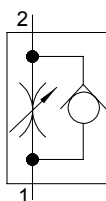
Throttling valves

(Increases operation time in 'open' and 'closed' direction)



Check valve with throttling function

(Increases operation time in 'open' or 'closed' direction)



Lock-up valve

(Holds the air in the actuator in the event of air failure)



Air set including gauge

(Reduces air pressure and removes dust and water droplets)



Limit switch

(to denote end of travel)
electrical (mechanical)
opener / shutter



Limit switch

(to denote end of travel)
inductive (contactless)
opener / shutter



Proximity sensors

(to denote end of travel in housing)

Position indicator

(analogue feedback of valve position in housing)

Pneumatic and electropneumatic positioner with column design

(allocation of valve control and control signal)



Electropneumatic positioner with direct mounting (DP32/DP33)

(allocation of valve control and control signal)

