

90° "AP-I" SERIES, 120° "AP-Y" SERIES , 180° "AP-X" SERIES

Automation industry mainly exploits two-way quarter turn valves, of ball, butterfly and conic pin type, which require actuators with 90° drive shaft rotation.

I SERIES = 90° actuators (90° shaft rotation) therefore represent ALPHAIR standard version.

Anyhow, for automation of three-way deviator valves, two special actuator series are available:

Y SERIES = 120° with 120° drive shaft rotation.

X SERIES = 180° with 180° drive shaft rotation.

For both Y and X series, following sizes are available:

AP 032 - AP 042 - AP 050 - AP 063 - AP 075 - AP 085 - AP 100 - AP 115 - AP 125

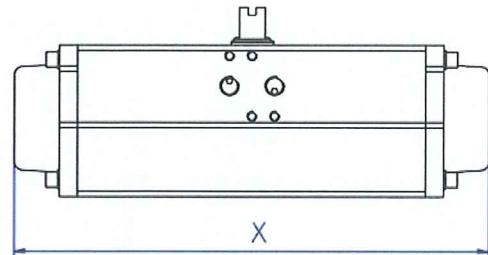
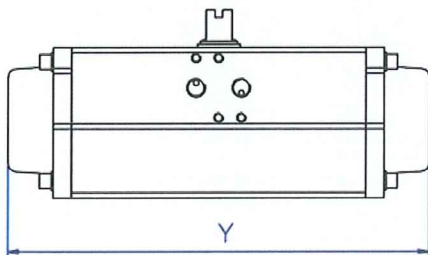
Features, identification, construction parts, materials and relevant protections, high/low temperature spare-part sets and use in hazardous environments, are the same as those of standard **I SERIES = 90°**.

Also installation, adjustment and maintenance procedures are identical to those of standard **I SERIES = 90°** so, where no special advise is done, all contents of this catalogue refer to the three I, Y and X series.

Some manufacture differences obviously exist on **Y SERIES = 120°** and **X SERIES = 180°** with respect to I SERIES = 90°.

- Shapes and side dimensions are identical, but **the total length is bigger.**
- **The internal volumes, and related rotating times are higher.**
- **Weights are higher.**
- **Only "standard in stock" called flanges "F" ISO 5211\DIN 3337 are available.**
Starlike shafts are available in all drive square dimensions.
- **Spring Return "SR" versioned actuators are available by using a special "DA/SR" transforming KIT.**
- **Output torques are the same as those of standard I SERIES = 90°.**

Below tables show the main features of "DA" versioned Y and X series.



"DA" versioned Y SERIES = 120°

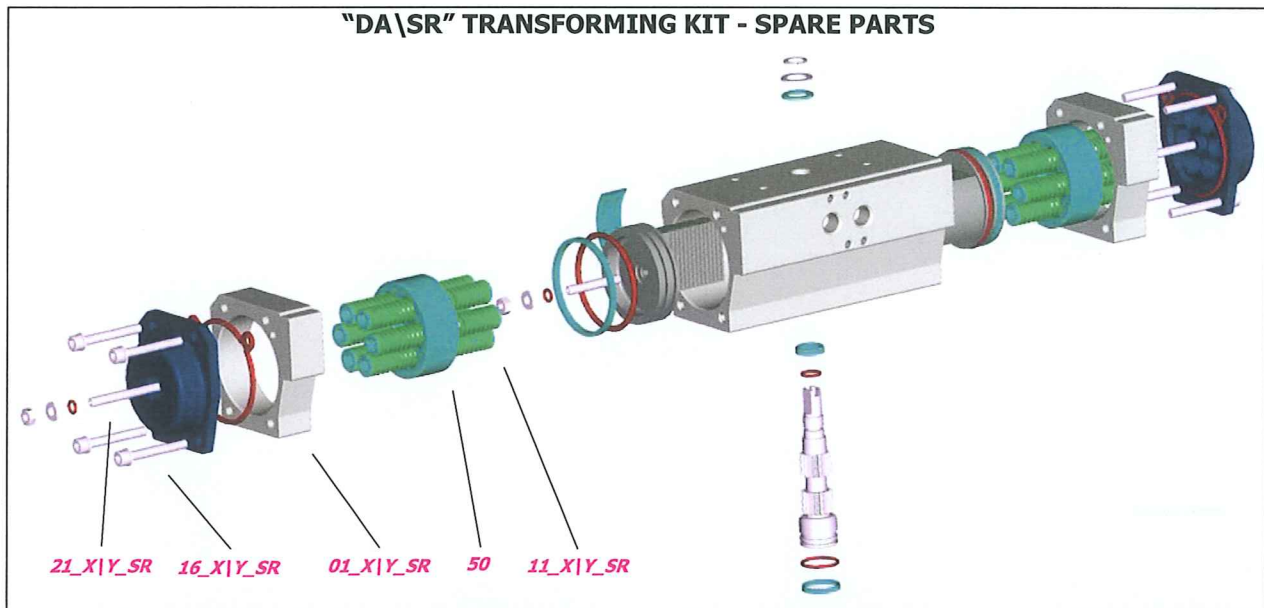
	AP 032 Y	AP 042 Y	AP 050 Y	AP 063 Y	AP 075 Y	AP 085 Y	AP 100 Y	AP 115 Y	AP 125 Y
Y mm	133	175	163	180	239	273	322	363	424
Volume (Lt)	0,10	0,21	0,27	0,58	0,70	1,15	2,10	3,40	4,60
Opening (sec)	0,60	0,60	0,70	0,75	0,75	0,75	1,00	1,10	1,40
Closing (sec)	0,60	0,60	0,70	0,85	0,85	1,00	1,10	1,30	1,60
Weight (Kg)	0,550	1,000	1,300	1,900	3,300	4,800	6,700	10,600	13,400
F	F 03	F 03\05	F 04	F 05	F 05\07	F 05\07	F 07\10	F 07\10	F 07\10
Q	9	9 - 11	9 - 11	9-11-14	11-14-17	14 - 17	17 - 22	17 - 22	22 - 27

"DA" versioned X SERIES = 180°

	AP 032 X	AP 042 X	AP 050 X	AP 063 X	AP 075 X	AP 085 X	AP 100 X	AP 115 X	AP 125 X
X mm	166	211	196	214	297	332	398	451	518
Volume (Lt)	0,15	0,30	0,39	0,73	1,00	1,50	2,80	4,50	5,90
Opening (sec)	0,70	0,80	0,85	0,85	0,85	1,00	1,20	1,40	1,80
Closing (sec)	0,70	0,80	0,85	1,00	1,00	1,40	1,50	1,70	2,10
Weight (Kg)	0,750	1,200	1,700	2,500	4,700	7,000	10,000	15,500	19,200
F	F 03	F 03\05	F 04	F 05	F 05\07	F 05\07	F 07\10	F 07\10	F 07\10
Q	9	9 - 11	9 - 11	9-11-14	11-14-17	14 - 17	17 - 22	17 - 22	22 - 27

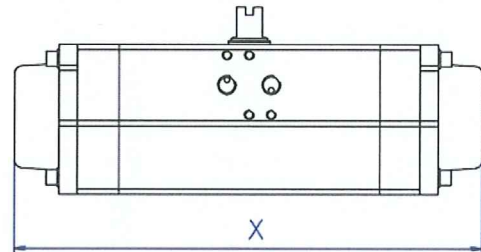
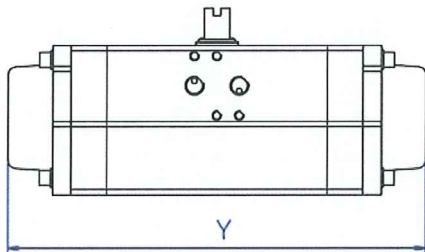
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120° "AP-Y" SERIES , 180° "AP-X" SERIES – Transforming kit DA/SR



PART	QUANTITY	DESCRIPTION	MATERIAL	SPECIFICATION
01_X Y_SR	2	Added body	Extruded aluminium alloy	ASTM 6063 T6
11_X Y_SR	0-12	Spring cartridge	Carbon Steel, PA 66, S.S. Steel	C-98
16_X Y_SR	8	Cover fastening screw	S.S. Steel	AISI 304 (A2)
21_X Y_SR	2	Cover dowel	S.S. Steel	AISI 304 (A2)
50	2	Spring internal guide	Polyamide	

Below tables show the main features of "SR" versioned Y and X series.



"SR" version Y SERIES = 120°									
	AP 032 Y	AP 042 Y	AP 050 Y	AP 063 Y	AP 075 Y	AP 085 Y	AP 100 Y	AP 115 Y	AP 125 Y
Y mm	-	201	218	251	315	358	428	487	562
Volume (Lt)	-	0,230	0,300	0,640	0,770	1,270	2,310	3,740	5,100
Opening (sec)	-	0,7	0,8	0,8	0,9	1,0	1,1	1,2	1,5
Closing (sec)	-	0,7	0,8	0,8	0,9	1,0	1,1	1,2	1,5
Weight (Kg)	-	1,490	2,100	3,140	5,130	7,230	10,590	14,560	19,390
F	-	F 03\05	F 04	F 05	F 05\07	F 05\07	F 07\10	F 07\10	F 07\10
Q	-	9 - 11	9 - 11	9-11-14	11-14-17	14 - 17	17 - 22	17 - 22	22 - 27

"SR" version X SERIES = 180°									
	AP 032 X	AP 042 X	AP 050 X	AP 063 X	AP 075 X	AP 085 X	AP 100 X	AP 115 X	AP 125 X
X mm	-	237	242	264	363	408	494	576	700
Volume (Lt)	-	0,330	0,440	0,800	1,100	1,650	3,100	4,950	6,500
Opening (sec)	-	0,9	1,0	1,0	1,1	1,2	1,3	1,4	1,8
Closing (sec)	-	0,9	1,0	1,0	1,1	1,2	1,3	1,4	1,8
Weight (Kg)	-	1,690	2,410	4,330	6,530	9,430	13,890	19,460	25,190
F	-	F 03\05	F 04	F 05	F 05\07	F 05\07	F 07\10	F 07\10	F 07\10
Q	-	9 - 11	9 - 11	9-11-14	11-14-17	14 - 17	17 - 22	17 - 22	22 - 27

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