

TYPE
APM
 DOPPIO EFFETTO (D.E.)
 SINGOLO EFFETTO (S.E.)
 DOUBLE ACTING (D.A.)
 SINGLE ACTING (S.A.)

ATTUATORI PNEUMATICI PNEUMATIC ACTUATORS

ACTIONNEURS PNEUMATIQUE PNEUMATISCHER AUSLÖSER

ATTUATORI PNEUMATICI
CERTIFICATI IP66
PNEUMATIC ACTUATORS
CERTIFIED IP66

ATTUATORI PNEUMATICI
CERTIFICATI S.I.L.3
PNEUMATIC ACTUATORS
CERTIFIED S.I.L.3

CE II 2GD Ex h X

PIGNONE IN ACCIAIO INOX
STAINLESS STEEL PINION

WWW.ADLERSPA.COM
 AMBIENT T. -20°C +80°C
 USE DRY AIR NOT
 LUBRICATED
 ACTUATORS ALREADY SET
 DO NOT CHANGE
 REGULATION

ADLER
REFERENCE

C = AIR TO CENTER
 L = AIR TO LATERAL
 ISO 7-Rp (BSP-GAS)

ISO TYPE: see table "1"
 Ch □: see table "1"



CONNECTION TO ADLER'S VALVES STRAIGHT WAY PN 40

DN	10	15	20	25	32	40	50	65	80	100	125	150	200	250*	300*
APM D.A.	102	105	105	123	123	148	164	164	186	214	214	287	305	305	352
APM S.A.	105	105	123	148	148	155	164	186	214	242	287	305	352	500	680
APM D.A.	105	123	123	148	164	164	186	214	214	287	305	305	352	680	750
APM S.A.	123	148	148	155	164	186	214	242	287	305	352	500	680	750	900

Valves DN 350 PN16: available also type 500 D.A. or type 680 S.A.

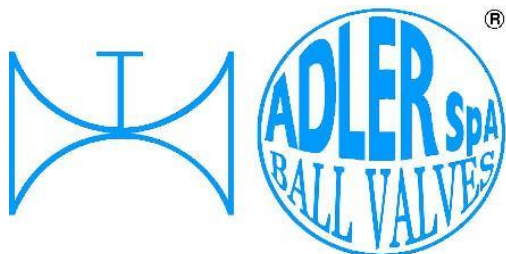
* PN 16

Min. air 5 bar

Min. air 3 bar

PRESSIONE DI ALIMENTAZIONE:*	pressione minima 2,5 bar / 35PSI pressione massima 6,5 bar / 95 PSI	SUPPLY PRESSURE:*	Min. pressure 2,5 bar / 35 PSI Max. pressure 6,5 bar / 95 PSI
ALIMENTAZIONE:	aria secca o lubrificata, filtrata	SUPPLY:	filtered dry or lubricated air
TEMPERATURA DI LAVORO:	-20°C ÷ +80°C	WORKING TEMPERATURE:	-20°C ÷ +80°C
CORSA:	90° con doppia regolazione meccanica ±3°	STROKE:	90° with standard double adjustment ±3°
LUBRIFICAZIONE:	tutte le parti in movimento sono lubrificate a vita	LUBRICATION:	all moving parts are lubricated for life
COSTRUZIONE:	idonea per essere installata in ambienti interni ed esterni	CONSTRUCTION:	suitable for indoor and outdoor installation
CONNESSIONI:	foratura inferiore per accoppiamento valvola, secondo NORME ISO 5211/DIN 3337. Interfaccia per elettrovalvola, estremità superiore albero e foratura superiore per fissaggio accessori secondo NORME VDI/VDE 3845, NAMUR.	CONNECTIONS:	bottom drilling valve side in accordance with ISO 5211/DIN 3337. Interface for solenoid valve, shaft top end and top drilling for assembling accessories in accordance with VDI/VDE 3845, NAMUR.

*PRESSIONI PIU' ELEVATE DISPONIBILI A RICHIESTA
 *HIGHER PRESSURE AVAILABLE ON REQUEST

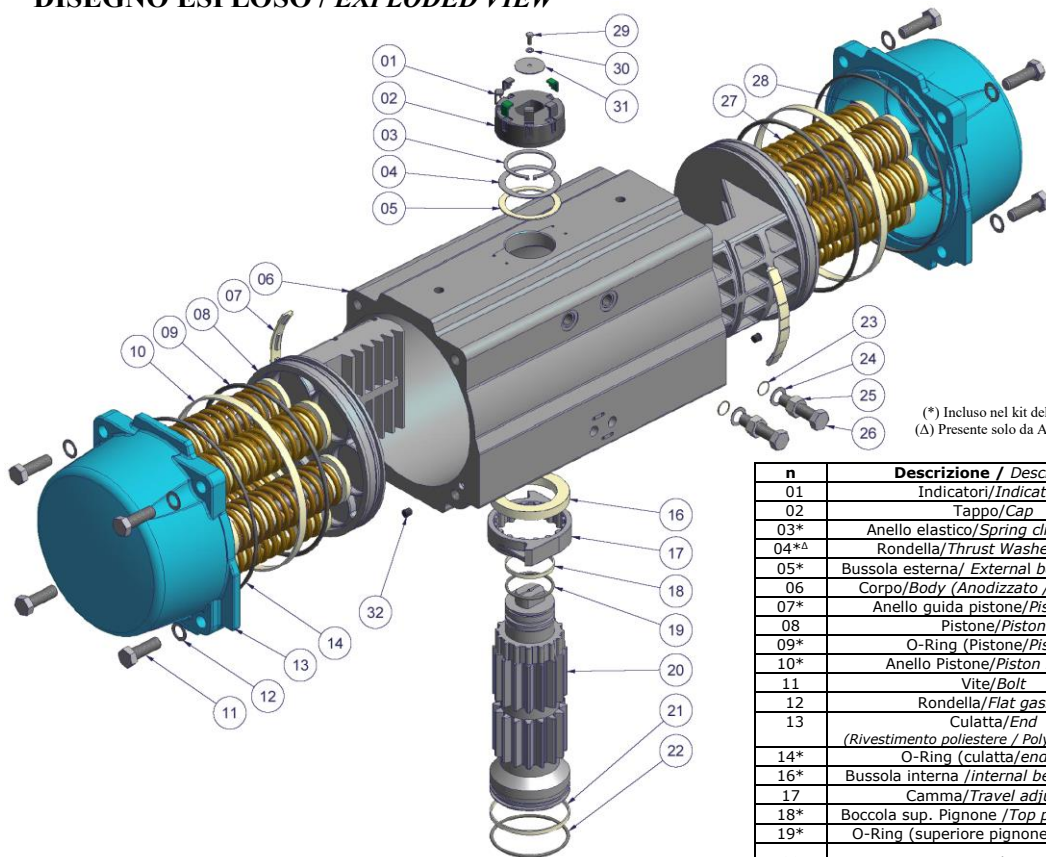


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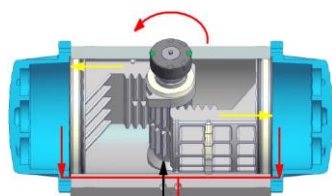
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DISEGNO ESPLOSO / EXPLODED VIEW



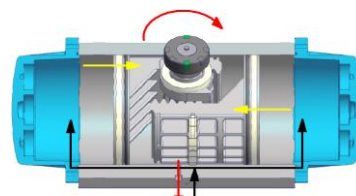
(*) Incluso nel kit delle parti di ricambio / Included into spare parts kit
 (Δ) Presente solo da APM 102 a APM 242 / Only from APM 102 to APM 242

n	Descrizione / Description	Materiali / Materials
01	Indicatori/Indicators	PP GF30
02	Tappo/Cap	PP GF30
03*	Anello elastico/Spring clip (pinion)	Acciaio inox / S.S.
04*Δ	Rondella/Thrust Washer (pinion)	Acciaio inox / S.S.
05*	Bussola esterna/ External bearing gasket	PPA
06	Corpo/Body (Anodizzato / Anodized)	AL6005 (Estruso/Extruded)
07*	Anello guida pistone/Piston bush	Nylon 6.6
08	Pistone/Piston	AL6005 (P. Fuso/Die cast)
09*	O-Ring (Pistone/Piston)	NBR70
10*	Anello Pistone/Piston bearing	PPA
11	Vite/Bolt	Acciaio inox / S.S.
12	Rondella/Flat gasket	Acciaio inox / S.S.
13	Culatta/End (Rivestimento poliestere / Polyester coating)	AL6005
14*	O-Ring (culatta/end cap)	NBR70
16*	Bussola interna /Internal bearing gasket	PPA
17	Camma/Travel adjuster	Acciaio inox / S.S.
18*	Boccola sup. Pignone /Top pinion bearing	PPA
19*	O-Ring (superiore pignone/Pinion top)	NBR70
20	Pignone/Pinion	APM102÷APM287: Acciaio inox / S.S. APM305÷APM900: C45
21*	Boccola inf. pignone/Bottom pinion bearing	PPA
22*	O-Ring (Infe Pignone/Pinion bottom)	NBR70
23*	O-Ring (vite regolazione/Adjusting bolt)	NBR70
24	Rondella/Washer (Regolazione/Adjusting)	Acciaio inox / S.S.
25	Dado/nut (Regolazione/Adjusting)	Acciaio inox / S.S.
26	Vite regolazione/Adjusting bolt	Acciaio inox / S.S.
27	Molle/Spring	60Si2MnA
28	Fissaggio molla/Spring cartridge	PP GF30
29	Vite/Bolt	Acciaio inox / S.S.
30	Rondella/Washer	Acciaio inox / S.S.
31	Rondella/Washer	Acciaio inox / S.S.
32*	Tappo culatta/End cap	NBR

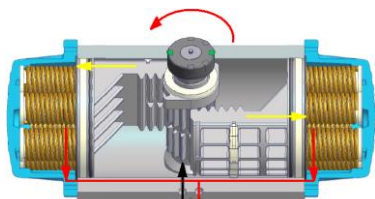


Ingresso aria "C" : movimento antiorario (apertura)
 Air to port "C": counterclockwise (open)

DOPPIO EFFETTO DOUBLE ACTING

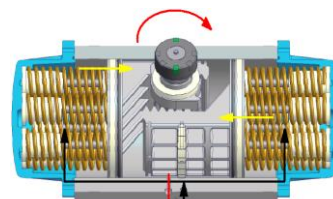


Ingresso aria "L" : movimento orario (chiusura)
 Air to port "L": clockwise (closed)



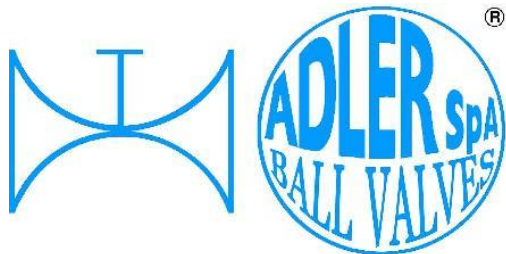
Ingresso aria "C" : movimento antiorario (apertura)
 Air to port "C": counterclockwise (open)

SINGOLO EFFETTO SINGLE ACTING



Senza aria : movimento orario (chiusura)
 Without air: clockwise (closed)

Per invertire la rotazione dell'attuatore invertire il pistone. Piston must be inverted to reverse actuator rotation.



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DIMENSIONI / DIMENSIONS

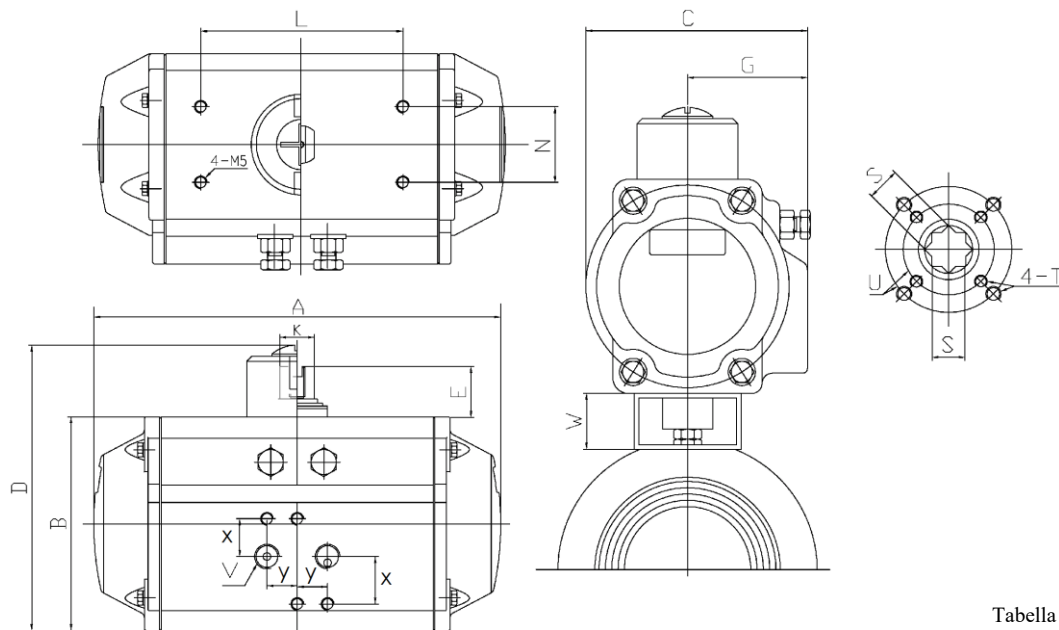
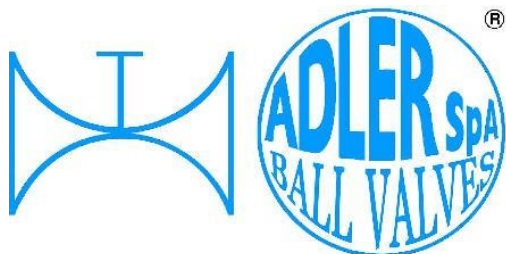


Tabella "1" / Table: "1"

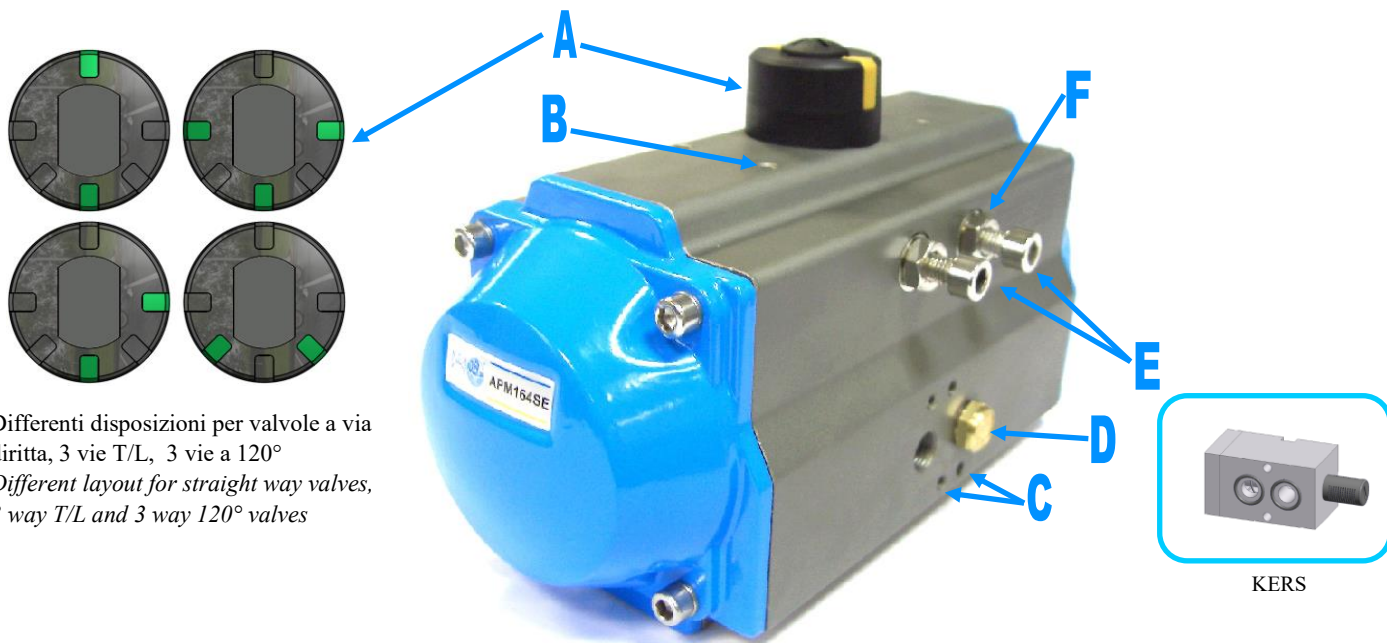
Model	ISO5211	T	A	B	C	D	E	G	K	L	N	V	X	Y	W	WEIGHT kg (D.A.)	WEIGHT kg (S.A.)
	U	S															
APM102	F03 Ø36	M5 9	118	45	47	65	20	22,5	8	50	25	1/8" G	16	12	40	0,55	
APM105	F03/F05 Ø 36/ Ø 50	M5/M6 9	142	69	70,5	89	20	41,5	8	80	30	1/4" G	16	12	40	1,15	1,25
APM 123	F03/F05 Ø 36/ Ø 50	M5/M6 11	163	85	83,5	105	20	47,5	8	80	30	1/4" G	16	12	40	1,75	1,92
APM 148	F05/F07 Ø 50/ Ø 70	M6/M8 14	214	102	94	122	20	51	10	80/130	30	1/4" G	16	12	40	2,9	3,34
APM 155	F05/F07 Ø 50/ Ø 70	M6/M8 17	205	109	103	129	20	57	12	80	30	1/4" G	16	12	40	3,22	3,62
APM 164	F05/F07 Ø 50/ Ø 70	M6/M8 17	252	115	105	135	20	55,5	14	80/130	30	1/4" G	16	12	60	3,85	4,78
APM 186	F07/F10 Ø 70/ Ø 102	M8/M10 17	272	127	120	147	20	64	14	80/130	30	1/4" G	16	12	60	5,35	6,59
APM 205	F07/F10 Ø 70/ Ø 102	M8/M10 22	316	145	138	175	30	74	20	80/130	30	1/4" G	16	12	60	8,5	9,9
APM 214	F07/F10 Ø 70/ Ø 102	M8/M10 22	353	157	147,5	187	30	78,5	20	80/130	30	1/4" G	16	12	60	10,5	12,6
APM 242	F10/F12 Ø 102/ Ø 125	M10/M12 27	418	178	167	208	30	87	28	80/130	30	1/4" G	16	12	60	14,85	18,9
APM 287	F10/F12 Ø 102/ Ø 125	M10/M12 27	450	200	193	230	30	104	28	80/130	30	1/4" G	16	12	60	19,6	23,4
APM 305	F10/F14 Ø 102/ Ø 140	M10/M16 36	525	232	208	262	30	105	32	80/130	30	1/4" G	16	12	80	37,2	45,5
APM 333	F14 Ø140	M16 36	560	257	227	287	30	114	32	130	30	1/4" G	16	12	80	52	62
APM 352	F16 Ø 165	M20 46	620	292	260	322	30	130	32	130	30	1/4" G	16	12	80	56,4	70,8
APM 500	F16 Ø 165	M20 46	700	332	295	362	30	148	32	130	30	1/2" G	16	12	80	81,2	101,4
APM 680	F16 Ø 165	M20 46	860	354	335	384	30	173	32	130	30	1/2" G	16	12	80	115	155
APM 750	F16/F25 Ø165 / Ø254	M20/M16 50/46	935	410	385	440	30	195	32	130	30	1/2" G	22,5	20	80	153	220
APM 900	F16/F25 Ø165 / Ø254	M20/M16 50/46	1035	466	520	496	30	260	32	130	30	1/2" G	22,5	20	80	200	290



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Differenti disposizioni per valvole a via dritta, 3 vie T/L, 3 vie a 120°
Different layout for straight way valves, 3 way T/L and 3 way 120° valves

KERS

S = standards / O = optional

Indicatore a più posizioni

Multipositions indicator

Vedi particolare "A"
See particular "A"

Attacco NAMUR per box e finecorsa (v. particolare "B") e per elettrovalvola (v. particolare "C")

NAMUR connections for box and limit switches (see particular "B") and for solenoid valve (see particular "C")

In accordo a / In accordance with VDI / VDE 3845

Attuatori con corsa 120° e 180°
Actuators with stroke 120° and 180°

Filtro silenziatore su scarico aria per attuatori singolo effetto

Silencer filter on air exhaust for single acting actuators

Vedi particolare "D"
See particular "D"

Vite di regolazione con corsa lunga 100mm

Adjustment screw with stroke 100mm

Vedi particolare "E"
See particular "E"

Corpo in alluminio anodizzato duro, spessore min 50 µm, colore champagne, laterali in alluminio verniciati RAL 5012 epossidico bicomponente spessore min 50 µm

Aluminium body with hard anodization, champagne color, thickness 50 µm. Aluminium end-caps painted RAL 5012 epoxy bicomponent thickness 50 µm min.

Rotazione antioraria

Counterclockwise rotation

Vite di regolazione con blocco antisvitamento

Adjustment screw with unscrewing locking

Vedi particolare "F"
See particular "F"

Pignone inox

Per modelli fino a APM 287
 Opzionale per gli altri

*Stainless steel pinion for models up to APM 287
 Optional for others*

Corpo e laterali anodizzati + rivestimento in PTFE

Body and end caps anodized + PTFE coated

Temperature:

Bassa temperatura:
Low temperature:
 -40°C + 80°C

Alta temperatura:
High temperature:
 -15°C +150°C

Attuatori sgrassati per uso ossigeno

Actuators degreased for oxygen service