



AUTOMATION

CILINDRI A NORMA ISO6432
ISO6432 CYLINDERS

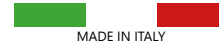
SERIE

MA

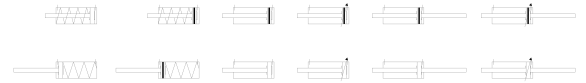


MADE IN ITALY

CILINDRI ISO6432 Ø08 - Ø25
ISO6432 CYLINDERS Ø08 - Ø25



VERSIONI - VERSIONS



Materiali - Materials	
Testate - Covers	Alluminio anodizzato Anodized aluminum
Tubo - Tube	Acciaio inox AISI304 Stainless steel AISI304
Stelo - Piston rod	Acciaio inox AISI303 Stainless steel AISI303
Pistone - Piston	Ottone Ø8-12 Alluminio Ø16-25 Brass Ø8-12 Aluminum Ø16-25
Guarnizioni - Seals	Poliuretano Polyurethane
Boccola guida Guiding bush	Bronzo sinterizzato Sintered bronze

Informazioni tecniche - Technical features	
Fluido - Fluid	Aria compressa filtrata lubrificata e non Filtered and lubricated or not compressed air
Temp. impiego Working Temp.	-35°C +80°C con aria secca / w dry air
Pressione MAX MAX pressure	10 bar

CHIAVE DI CODIFICA - KEY CODE

Base		Versioni - Versions						Ø	Corsa - Stroke	
MA	SA	Semplice effetto molla anteriore	0	Standard	M	Magnetico	A	Ammortizzato	008	0005
		Single acting front spring		Standard		Magnetic		Cushioned		
	SP	Semplice effetto molla posteriore	1	Passante	N	Non magnetico	N	Non ammortizzato	012
		Single acting rear spring		Through rod		Not magnetic		Not Cushioned		
	DE	Doppio effetto						020	025	1000
		Double acting						025		

CODICE ESEMPIO - SAMPLE CODE

MA	SA	0	M	N	012	0100	+	varianti	variants
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VARIANTI - VARIANTS

Guarnizioni Seals		Versione Version	Materiale stelo Piston rod material		Filetto stelo speciale Special piston rod thread	Prolunga stelo Extended piston rod		Atex	
HR	Guarnizione stelo Viton	E	Antirotaazione	X	AISI316	Su richiesta	PXXX	xxx = mm	T
	Viton Rod seal		Not rotating			On request			
HA	Tutto Viton	R	Vers. corta alim. radiale						
	All Viton		Short version radial inlet						
		A	Vers. corta alim. assiale						
			Short version axial inlet						

CORSE STANDARD - STANDARD STROKES

Ø	10	25	50	80	100	125	160	200	250	320	400	500
8	XY	XY	XY	Y	Y							
10	XY	XY	XY	Y	Y							
12	XY	XY	XY	Y	Y	Y	Y	Y				
16	XY	XY	XY	Y	Y	Y	Y	Y				
20	XY	XY	XY	Y	Y	Y	Y	Y	Y	Y		
25	XY	XY	XY	Y	Y	Y	Y	Y	Y	Y	Y	Y

X= Cilindro semplice effetto - Single acting cylinder

Y= Cilindro doppio effetto - Double acting cylinder

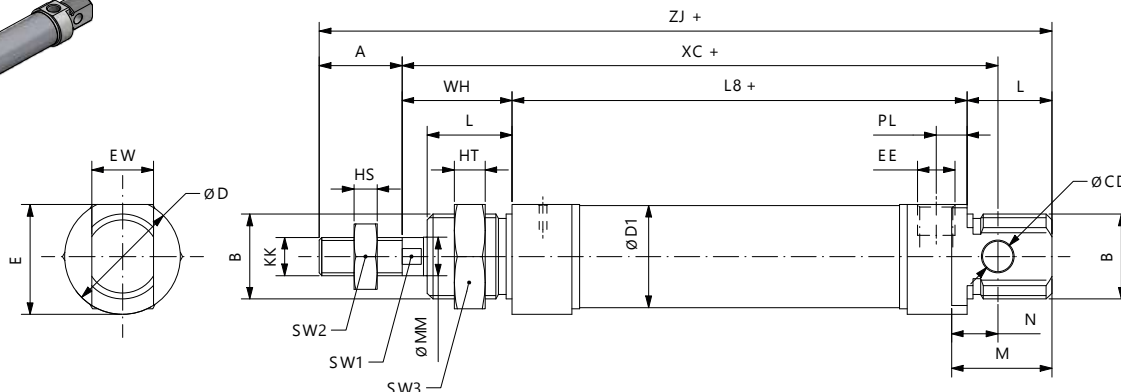
FORZE TEORICHE - THEORETICAL FORCES

Forze teoriche molle - Theoretical spring forces (N)												
Ø	Molla anteriore - Front spring						Molla posteriore - Rear spring					
	Corsa - Stroke						Corsa - Stroke					
	10		25		50		10		25		50	
	F1	F2	F1	F2	F1	F2	F1	F2	F1	F2	F1	F2
08	4,1	4,6	3,4	4,6	2,2	4,6	5,5	6	4,8	6	3,6	6
10	4,1	4,6	3,4	4,6	2,2	4,6	5	6,2	3,3	6,2	-	-
12	5,6	6	5,5	6	4,1	6	13	14,2	11,3	14,2	8,5	14,2
16	19,2	21,5	15,7	21,5	9,8	21,5	19	20,7	16,3	20,7	12	20,7
20	20,4	22,5	17,3	22,5	11,7	22,5	57,2	61,5	50,7	61,5	39,8	61,5
25	17,5	18,8	15,58	18,8	12,4	18,8	28,5	30,6	25,3	30,6	19,8	30,6

Forze teoriche a 6 bar		
Theoretical forces at 6 bar		
Ø	Forza di spinta (N)	Forza in trazione (N)
	Thrust force (N)	Traction force (N)
08	30	23
10	47	40
12	68	51
16	121	104
20	189	158
25	295	247

SEMPLICE EFFETTO MOLLA ANTERIORE - SINGLE ACTING FRONT SPRING

MASA0NN - MASA0MN

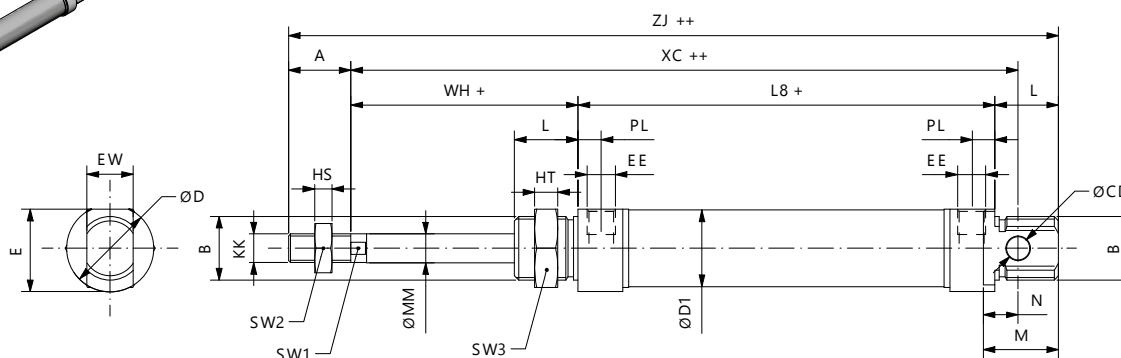


Ø	B	KK	SW1	A	WH	ØMM	L	HS	HT	SW2	SW3	M	PL	EE	ØD1	L8	XC	ZJ	N	ØCD	EW	ØD	E
8	M12x1.25	M4x0.7	-	12	16	4	12	3,2	6	7	19	16	5	M5	9,27	46	64	86	6	4	8	16	15
10	M12x1.25	M4x0.7	-	12	16	4	12	3,2	6	7	19	16	5	M5	11,27	46	64	86	6	4	8	16	15
12	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	22	5	M5	13,27	48	75	104	9	6	12	19	18
16	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	20	4.5	M5	17,27	53	82	109	9	6	12	19	18
20	M22x1.5	M8x1.25	7	20	24	8	20	5	8	13	27	28	8	1/8 G	21,27	67	95	131	12	8	16	27	25,5
25	M22x1.5	M10x1.25	9	22	28	10	22	6	8	17	27	26	8	1/8 G	26,5	68	104	140	12	8	16	30	28,5

+ = sommare corsa / plus stroke length

SEMPLICE EFFETTO MOLLA POSTERIORE - SINGLE ACTING REAR SPRING

MASPONN - MASPOMN



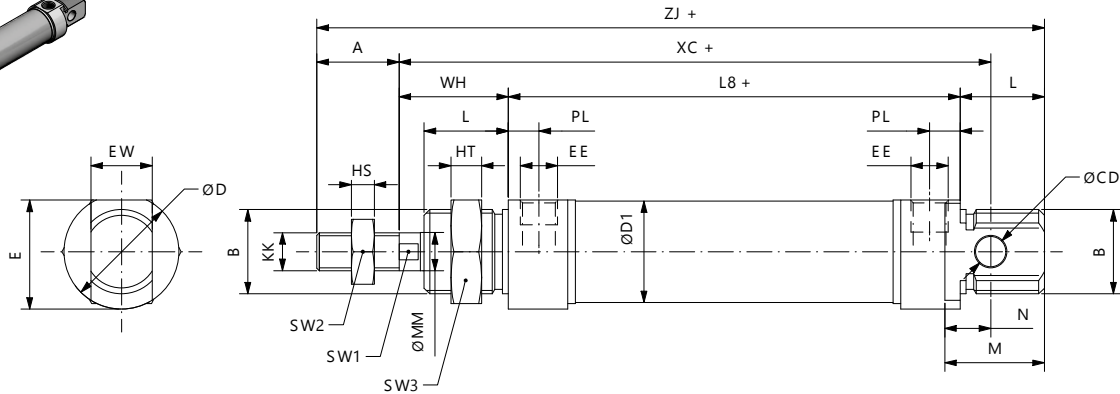
Ø	B	KK	SW1	A	WH	ØMM	L	HS	HT	SW2	SW3	M	PL	EE	ØD1	L8	XC	ZJ	N	ØCD	EW	ØD	E
8	M12x1.25	M4x0.7	-	12	16	4	12	3,2	6	7	19	16	5	M5	9,27	64	82	104	6	4	8	16	15
10	M12x1.25	M4x0.7	-	12	16	4	12	3,2	6	7	19	16	5	M5	11,27	71,5	89,5	111,5	6	4	8	16	15
12	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	22	5	M5	13,27	70,5	97,5	126,5	9	6	12	19	18
16	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	20	4.5	M5	17,27	82	111	138	9	6	12	19	18
20	M22x1.5	M8x1.25	7	20	24	8	20	5	8	13	27	28	8	1/8 G	21,27	98,5	126,5	162,5	12	8	16	27	25,5
25	M22x1.5	M10x1.25	9	22	28	10	22	6	8	17	27	26	8	1/8 G	26,5	99,5	135,5	171,5	12	8	16	30	28,5

+ = sommare corsa / plus stroke length

++ = sommare 2 x corsa / plus stroke length x 2

DOPPIO EFFETTO - DOUBLE ACTING

MADE0NN - MADE0MN

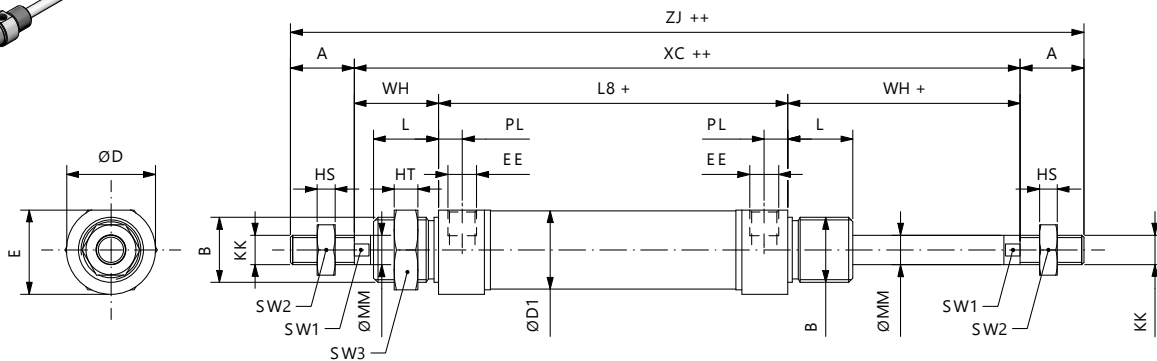


Ø	B	KK	SW1	A	WH	ØMM	L	HS	HT	SW2	SW3	M	PL	EE	ØD1	L8	XC	ZJ	N	ØCD	EW	ØD	E
8	M12x1.25	M4x0.7	-	12	16	4	12	3,2	6	7	19	16	5	M5	9,27	46	64	86	6	4	8	16	15
10	M12x1.25	M4x0.7	-	12	16	4	12	3,2	6	7	19	16	5	M5	11,27	46	64	86	6	4	8	16	15
12	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	22	5	M5	13,27	48	75	104	9	6	12	19	18
16	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	20	4.5	M5	17,27	53	82	109	9	6	12	19	18
20	M22x1.5	M8x1.25	7	20	24	8	20	5	8	13	27	28	8	1/8 G	21,27	67	95	131	12	8	16	27	25,5
25	M22x1.5	M10x1.25	9	22	28	10	22	6	8	17	27	26	8	1/8 G	26,5	68	104	140	12	8	16	30	28,5

+ = sommare corsa / plus stroke length

DOPPIO EFFETTO PASSANTE - DOUBLE ACTING THROUGH ROD

MADE1NN - MADE1MN



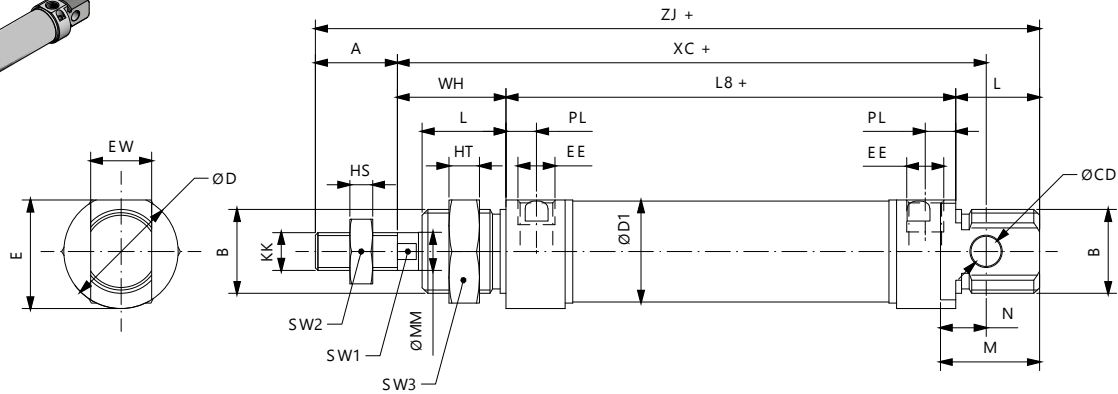
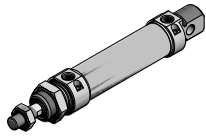
Ø	B	KK	SW1	A	WH	ØMM	L	HS	HT	SW2	SW3	PL	EE	ØD1	L8	XC	ZJ	ØD	E
8	M12x1.25	M4x0.7	-	12	16	4	12	3,2	6	7	19	5	M5	9,27	46	78	102	16	15
10	M12x1.25	M4x0.7	-	12	16	4	12	3,2	6	7	19	5	M5	11,27	46	78	102	16	15
12	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	5	M5	13,27	48	92	124	19	18
16	M16x1.5	M6x1	5	16	22	6	18	4	5	10	20	4.5	M5	17,27	53	97	129	19	18
20	M22x1.5	M8x1.25	7	20	24	8	20	5	8	13	28	8	1/8 G	21,27	67	115	155	27	25,5
25	M22x1.5	M10x1.25	9	22	28	10	22	6	8	17	26	8	1/8 G	26,5	68	124	168	30	28,5

+ = sommare corsa / plus stroke length

++ = sommare 2 x corsa / plus stroke length x 2

DOPPIO EFFETTO AMMORTIZZATO - DOUBLE ACTING CUSHIONED

MADE0NA - MADE0MA

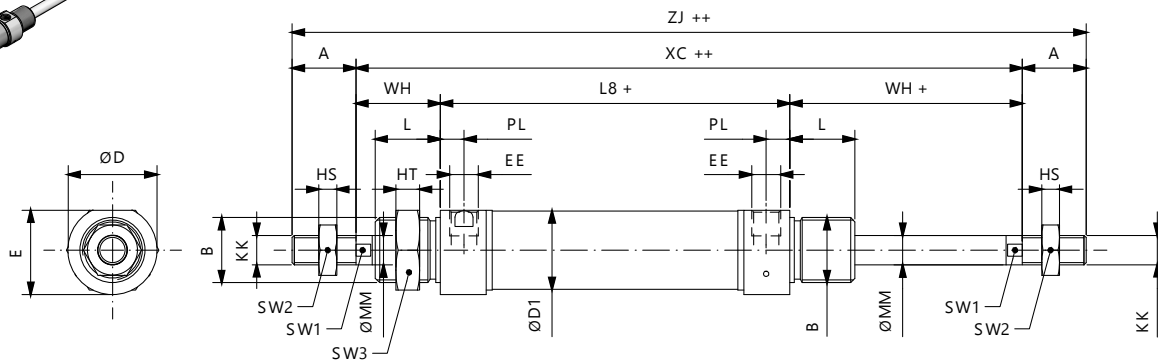


Ø	B	KK	SW1	A	WH	ØMM	L	HS	HT	SW2	SW3	M	PL	EE	ØD1	L8	XC	ZJ	N	ØCD	EW	ØD	E
16	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	20	5	M5	17,27	53	82	109	9	6	12	21	20
20	M22x1.5	M8x1.25	7	20	24	8	20	5	8	13	27	28	8	1/8 G	21,27	67	95	131	12	8	16	27	25,5
25	M22x1.5	M10x1.25	9	22	28	10	22	6	8	17	27	26	8	1/8 G	26,5	68	104	140	12	8	16	30	28,5

+ = sommare corsa / plus stroke length

DOPPIO EFFETTO AMMORTIZZATO PASSANTE - DOUBLE ACTING CUSHIONED THROUGH ROD

MADE1NA - MADE1MA



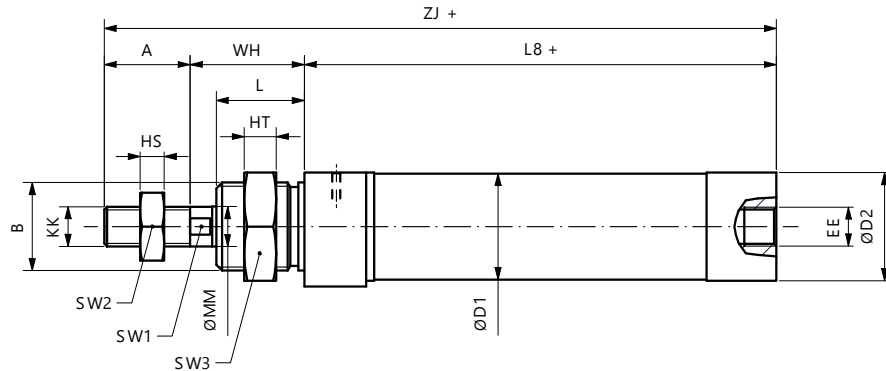
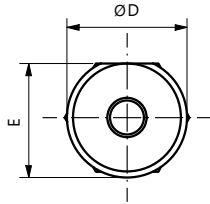
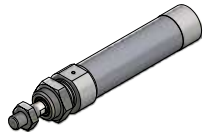
Ø	B	KK	SW1	A	WH	ØMM	L	HS	HT	SW2	SW3	PL	EE	ØD1	L8	XC	ZJ	ØD	E
16	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	5	M5	17,27	53	97	129	21	20
20	M22x1.5	M8x1.25	7	20	24	8	20	5	8	13	27	8	1/8 G	21,27	67	115	155	27	25,5
25	M22x1.5	M10x1.25	9	22	28	10	22	6	8	17	27	8	1/8 G	26,5	68	124	168	30	28,5

+ = sommare corsa / plus stroke length

++ = sommare 2 x corsa / plus stroke length x 2

VERSIONE CORTA SEMPLICE EFFETTO - SHORT VERSION SINGLE ACTING

ALIMENTAZIONE ASSIALE - AXIAL INLET

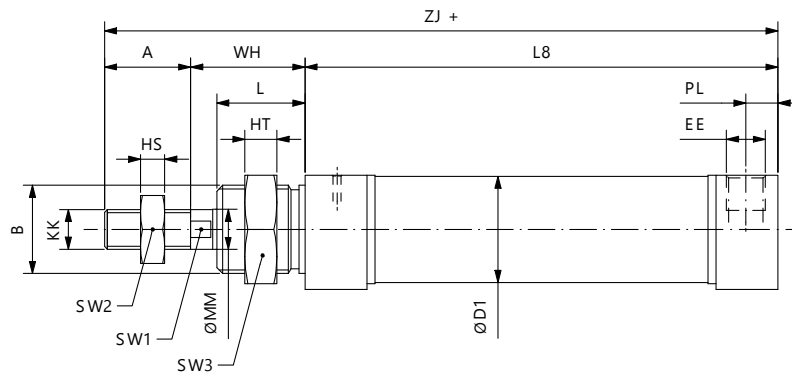
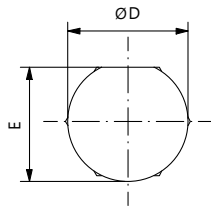


Ø	B	KK	SW1	A	WH	ØMM	L	HS	HT	SW2	SW3	EE	ØD1	L8	ZJ	ØD2	ØD	E
16	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	M5	17,27	52	90	17,2	19	18
20	M22x1.5	M8x1.25	7	20	24	8	20	5	8	13	27	1/8 G	21,27	65	109	22,2	27	25,5
25	M22x1.5	M10x1.25	9	22	28	10	22	6	8	17	27	1/8 G	26,5	66	116	27	30	28,5

+ = sommare corsa / plus stroke length

VERSIONE CORTA SEMPLICE EFFETTO - SHORT VERSION SINGLE ACTING

ALIMENTAZIONE RADIALE - RADIAL INLET

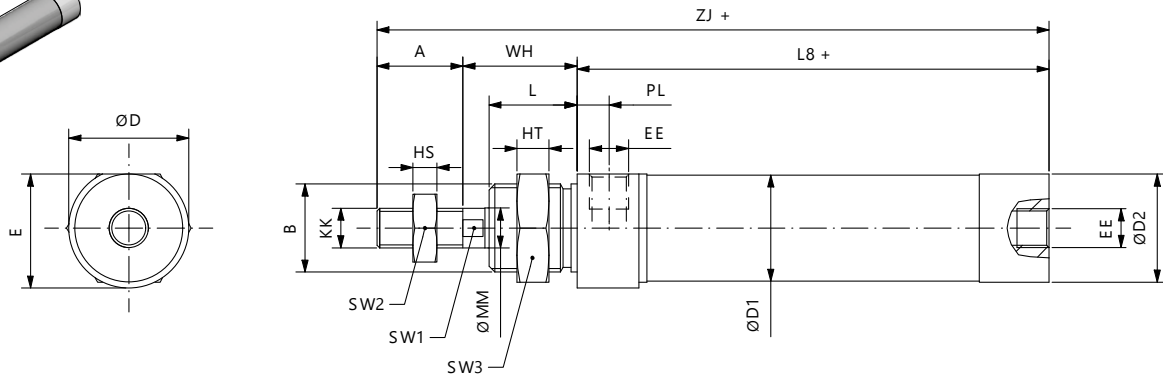


Ø	B	KK	SW1	A	WH	ØMM	L	HS	HT	SW2	SW3	EE	ØD1	L8	ZJ	PL	ØD	E
16	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	M5	17,27	52,5	90,5	4,5	19	18
20	M22x1.5	M8x1.25	7	20	24	8	20	5	8	13	27	1/8 G	21,27	67	111	8	27	25,5
25	M22x1.5	M10x1.25	9	22	28	10	22	6	8	17	27	1/8 G	26,5	68	118	8	30	28,5

+ = sommare corsa / plus stroke length

VERSIONE CORTA DOPPIO EFFETTO - SHORT VERSION DOUBLE ACTING

ALIMENTAZIONE ASSIALE - AXIAL INLET

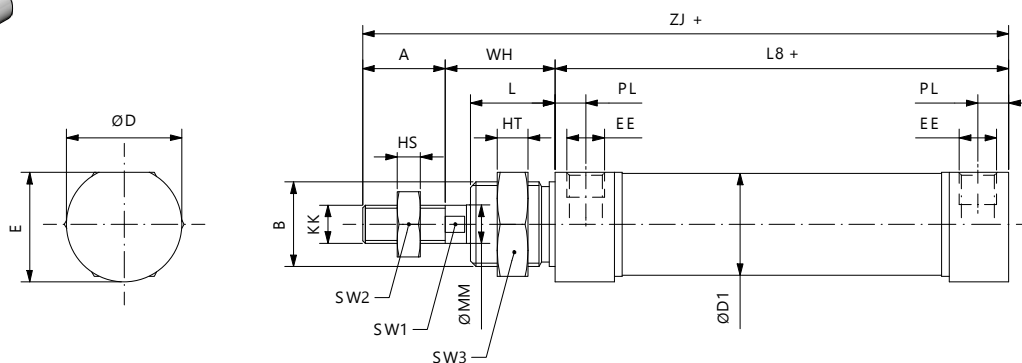


Ø	B	KK	SW1	A	WH	ØMM	L	HS	HT	SW2	SW3	PL	EE	ØD1	L8	ZJ	ØD2	ØD	E
16	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	4,5	M5	17,27	52	90	17,2	19	18
20	M22x1.5	M8x1.25	7	20	24	8	20	5	8	13	27	8	1/8 G	21,27	65	109	22,2	27	25,5
25	M22x1.5	M10x1.25	9	22	28	10	22	6	8	17	27	8	1/8 G	26,5	66	116	27	30	28,5

+ = sommare corsa / plus stroke length

VERSIONE CORTA DOPPIO EFFETTO - SHORT VERSION DOUBLE ACTING

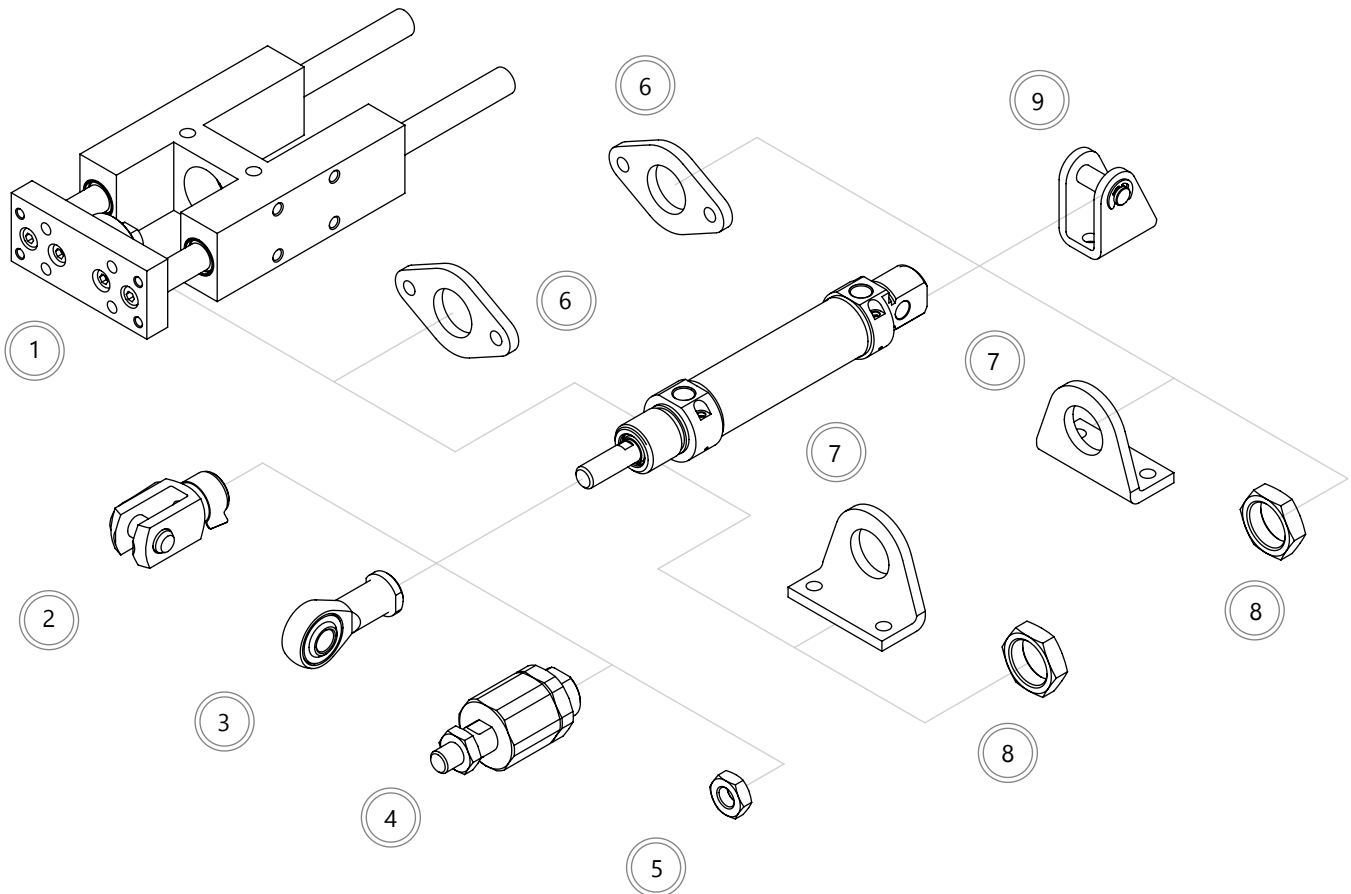
ALIMENTAZIONE RADIALE - RADIAL INLET



Ø	B	KK	SW1	A	WH	ØMM	L	HS	HT	SW2	SW3	EE	ØD1	L8	ZJ	PL	ØD	E
16	M16x1.5	M6x1	5	16	22	6	18	4	5	10	22	M5	17,27	52,5	90,5	4,5	19	18
20	M22x1.5	M8x1.25	7	20	24	8	20	5	8	13	27	1/8 G	21,27	67	111	8	27	25,5
25	M22x1.5	M10x1.25	9	22	28	10	22	6	8	17	27	1/8 G	26,5	68	118	8	30	28,5

+ = sommare corsa / plus stroke length

ACCESSORI DI FISSAGGIO - MOUNTING ACCESSORIES



	Descrizione Description	Acciaio Steel	Acciaio inox Stainless steel
1	Unità di guida Guide unit	191-193	-
2	Forcella Clevis	152	177
3	Testa a snodo Rod end	153	177
4	Giunto autoallineante Self-aligning joint	153	-
5	Dado stelo Piston rod nut	154	178
6	Flangia MF8 Flange MF8	158	179
7	Piedino MS3 Foot MS3	158	179
8	Dado testata Cover nut	154	178
9	Cerniera femmina MP3 Female hinge MP3	159	180

KIT DI MONTAGGIO - MOUNTING KIT

Contenuto del Kit - Kit parts
Kit cilindro doppio effetto magnetico ammortizzato Kit for double acting magnetic and cushioned cylinder
Testata anteriore completa / Complete front cover
Testata posteriore completa / Complete rear cover
Pistone completo / Complete piston
Dado stelo / Piston rod nut
Tappi protezione alimentazioni / Air supply protection caps
Dado testata / Cover nut
MADE0MAØK001

Kit disponibile anche nelle altre versioni.
 Kit available also in other versions.



BARRA STELO - PISTON ROD BAR

Ø cilindro cylinder Ø	Barra stelo - Piston rod bar		Ø stelo Piston rod Ø
	Barra stelo in AISI303 AISI303 piston rod bar	Barra stelo in AISI316 AISI316 piston rod bar	
08-10	V30BRT0304000	V30BRT0504000	4
12-16	V30BRT0306000	V30BRT0506000	6
20	V30BRT0308000	V30BRT0508000	8
25	V30BRT0310000	V30BRT0510000	10

Barre lunghezza 3 metri
 3 meter long bars



BARRA TUBO - TUBE BAR

Ø cilindro cylinder Ø	Barra tubo - Tube bar	
	Barra tubo in AISI304 AISI304 tube bar	
08	V30TGT0408000	Ø8XØ9,27
10	V30TGT0410000	Ø10XØ11,27
12	V30TGT0412000	Ø12XØ13,27
16	V30TGT0416000	Ø16XØ17,27
20	V30TGT0420000	Ø20XØ21,27
25	V30TGT0425000	Ø25XØ26,52

Barre lunghezza 3 metri
 3 meter long bars



Barre tubo e barre stelo disponibili anche lavorate e tagliate a misura/corsa.
 Tube bars and piston rod bars available also worked and cut at length/stroke.