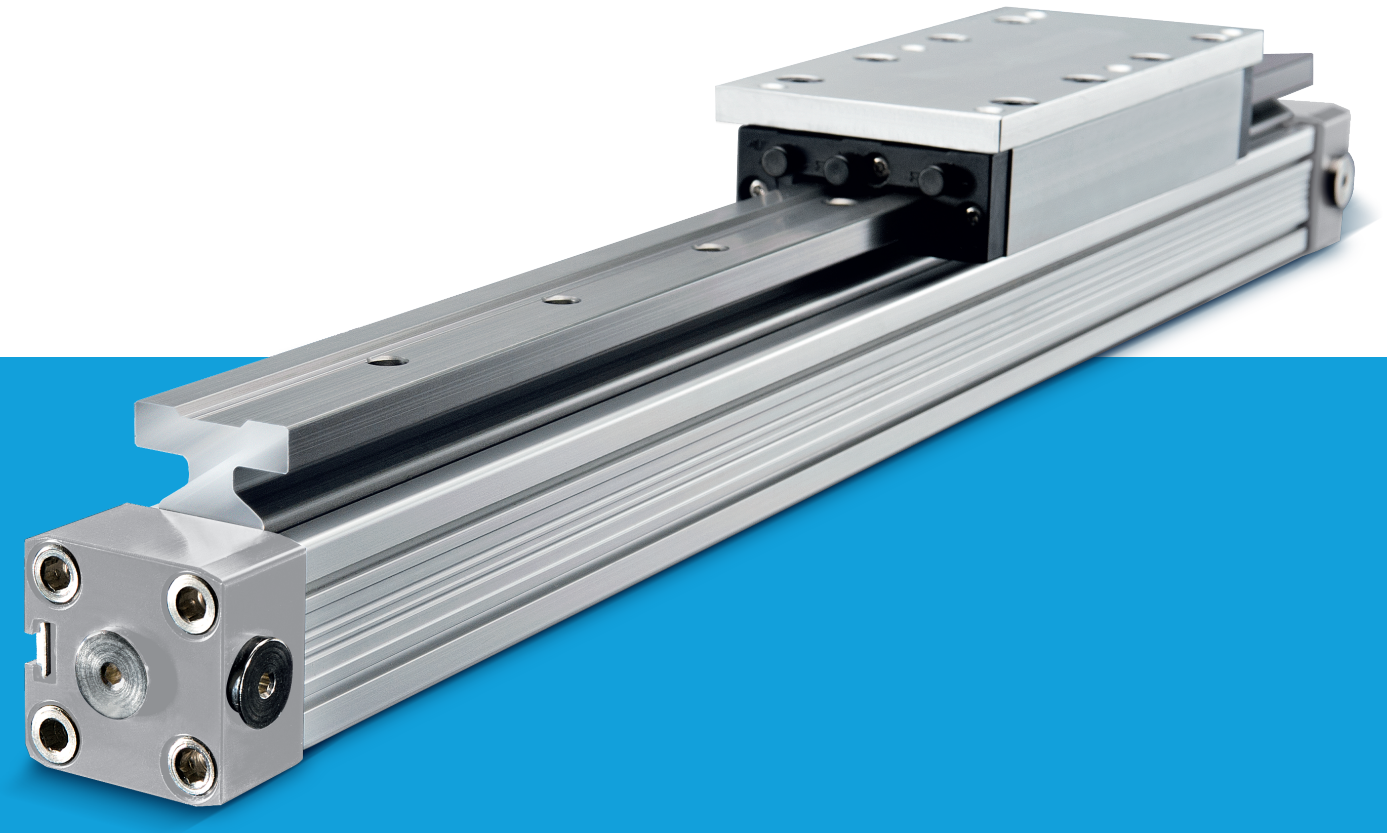
04_03.

SERIE R1D CON GUIDA A STRISCIAMENTO
R1D SERIES WITH SLIDING GUIDE



Questo sistema lineare estremamente robusto della serie R1D 16-40 è stato sviluppato appositamente per l'uso nella macchina utensile e industrie di robotica. Il movimento forza migliore per questa serie è il nostro collaudato cilindro senza stelo Ø 16-40mm.

This extremely robust linear system refers to the series R1D 16-40 has been especially developed for use in the machine tool and robotic industries. The move force for this guide is our proven rodless cylinder Ø16-40 mm.

BENEFICI | *BENEFITS*

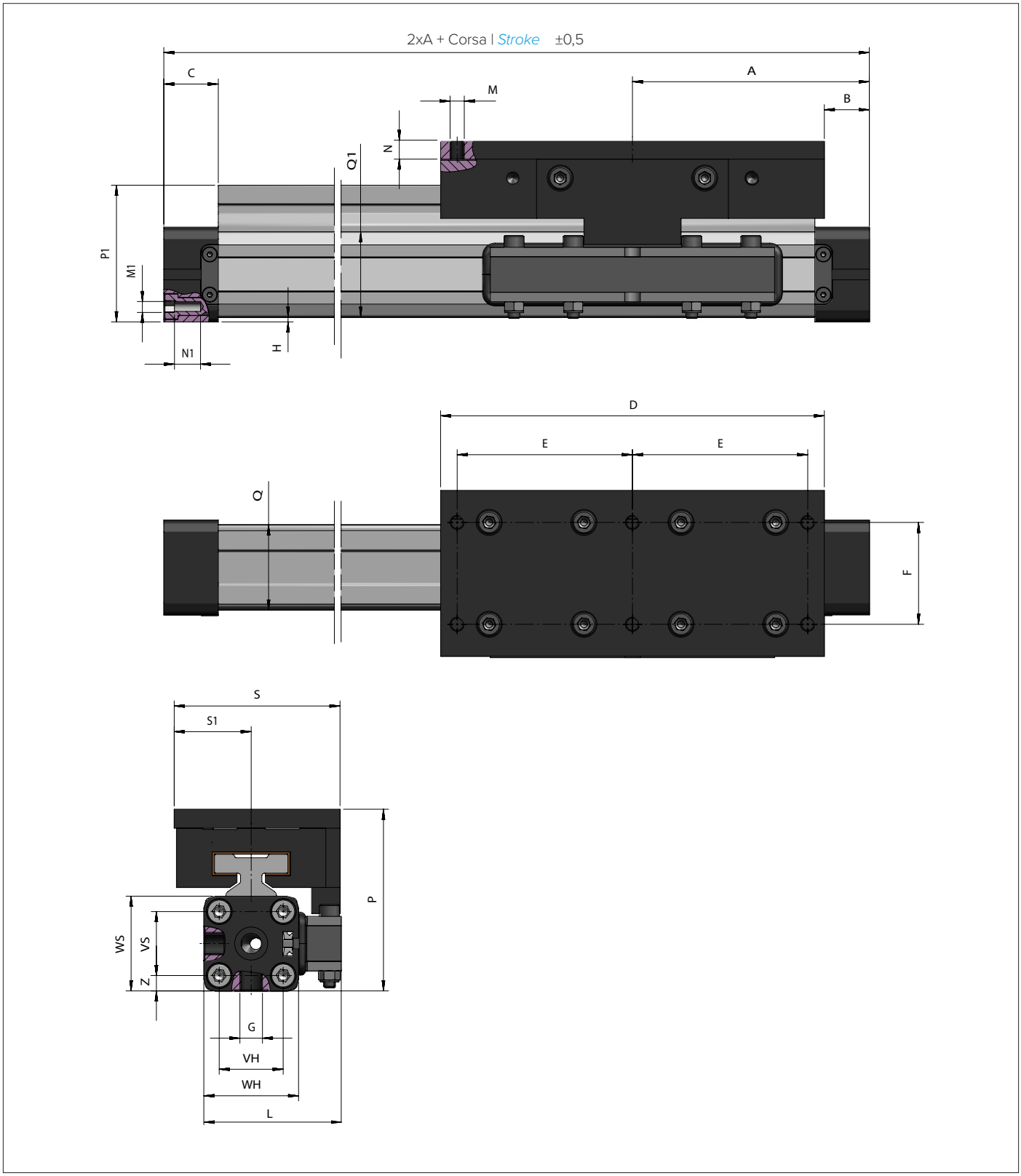
- Elevata resistenza all'usura
- Tolleranze regolabili
- Elevata resistenza alla corrosione
- Funzionamento silenzioso
- Capacità di sopportare carichi e momenti elevati in tutte le direzioni
- Elevata resistenza a urti e vibrazioni
- Elevata resistenza a sporco e umidità
- Leggerezza
- Elementi di scorrimento intercambiabili

- *High wear resilience*
- *Adjustable tolerance*
- *High resistance to corrosion*
- *Quiet running*
- *Ability to bear high loads & moments in all directions*
- *High resistance to shocks and vibrations*
- *High resistance to dirt & moisture*
- *Low weight*
- *Interchangeable gliding element*

CARATTERISTICHE TECNICHE | *TECHNICAL DATA*

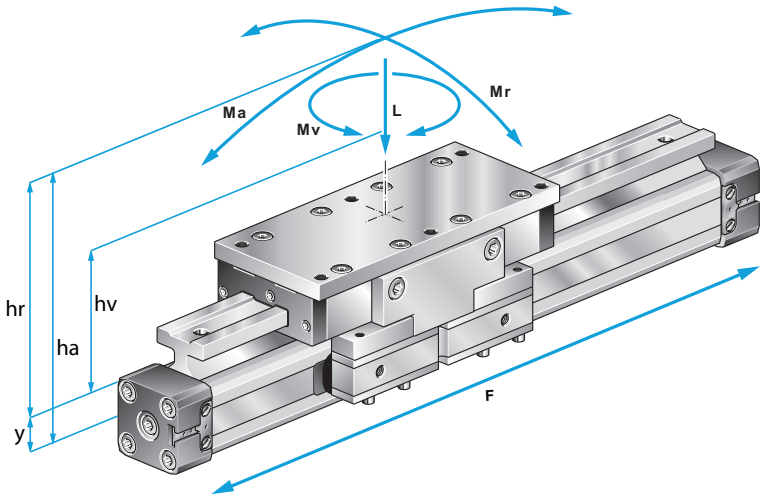
Design	Cilindro senza stelo, doppio effetto, trasmissione diretta	***Design***	*Rodless cylinder, double acting, direct force transmission*
Corse		***Strokes***	
Ø 16mm	100-3300 mm con incrementi di 1mm	*ø 16 mm*	*100-3300mm, in increments of 1mm*
Ø 25-40mm	100-5700mm, con incrementi di 1mm (corse più lunghe disponibili su richiesta)	*ø 25-40 mm*	*100-5700mm, in increments of 1mm (longer strokes on request)*
Attacco	(M5, G1/8", G1/4", G3/8")	***Air inlet***	*(M5, G1/8", G1/4", G3/8")*
Montaggio	Libero	***Mounting***	*Free*
Forze e Momenti	Vedi Forze e Momenti	***Forces + moments***	*See Forces and moments*
Forze Sopportate	Vedi Diagramma di Deformazione	***Support Forces***	*See Deflection Diagram*
Temperature	(da -10°C a +80°C) altre temperature su richiesta	***Temperatures***	*(-10°C to +80°C) other temperatures on request*
Materiali		***Materials***	
Cilindro	Alluminio anodizzato ad alta resistenza	*Barrel*	*High-strength anodized aluminum*
Guida	Alluminio anodizzato ad alta resistenza	*Guide*	*High-strength anodized aluminum*
Tappi Terminali	Alluminio anodizzato ad alta resistenza	*End cap*	*High-strength anodized aluminum*
Asse del pistone	Alluminio anodizzato ad alta resistenza	*Piston axle*	*High-strength anodized aluminum*
Guarnizioni	Materiale sintetico resistente ai lubrificanti (V < 1m/s (NBR) (V > = 1m/s (Viton)	*Seals*	*Oilproof synthetic material (V < 1m/s (NBR)(V > = 1m/s (Viton)*
Nastro di tenuta	Acciaio inossidabile	*Sealing bands*	*Stainless steel*
Tappi dei pistoni	Materiale sintetico resistente all'usura	*Piston caps*	*Wear proof synthetic material*
Parti scorrevoli	Materiale sintetico resistente all'usura	*Sliding parts*	*Wear proof synthetic material*
Campo di pressione	0,5-8,0 bar	***Pressure range***	*0,5-8,0 bar*
Fluido	Aria compressa, filtrata max. 50µm	***Medium***	*Compressed air, filtered max. 50µm*

DIMENSIONI | *DIMENSIONS*



Ø	A	C	D	E	F	G	H	L	M	N	M1	N1	P	QxQ1	S	S1	VH	VS	WH	WS	Z
16	65	15	90	20	36	M5	1,5	42,3	M4	10	M3	7	48,5	24,5x25	63	31,5	18	18	27	27	4,5
25	100	23	162	74	53	1/8	2,0	59,5	M6	8	M5	10	76,0	36x36	70	32,5	27	27	40	40	6,5
32	125	27	162	74	53	1/4	2,0	82	M6	8	M6	14	88,5	52x48	70	32,5	40	36	52	52	8,0
40	150	30	162	74	53	1/4	7,0	93	M6	8	M6	17	103	58x58	70	32,5	54	54	69	72	9,0

FORZE E MOMENTI | *FORCES AND MOMENTS*

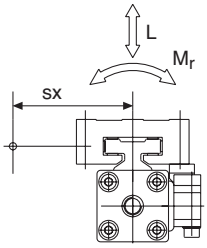


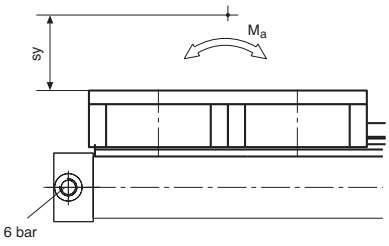
FORMULE *FORMULAS*

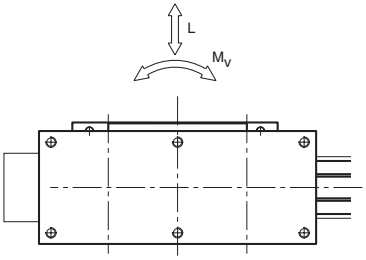
$M_a = F * h_a$

$M_r = F * h_r$

$M_v = F * h_v$







Ø	F (N) 6 bar	L max (N)	Mr max (Nm)	Ma max (Nm)	Mv Max (Nm)
16	110	350	4	6	6
25	250	1000	14	40	40
32	420	2000	24	68	68
40	640	2800	37	103	103

- Tutti i valori sono stati calcolati a velocità di 0,2m/s.
- Carichi combinati
- La durata del sistema di guida lineare può essere calcolata utilizzando la seguente formula:

$$\frac{M_a}{M_{a\,max}} + \frac{M_r}{M_{r\,max}} + \frac{M_v}{M_{v\,max}} + \frac{L}{L_{max}} \leq 1$$

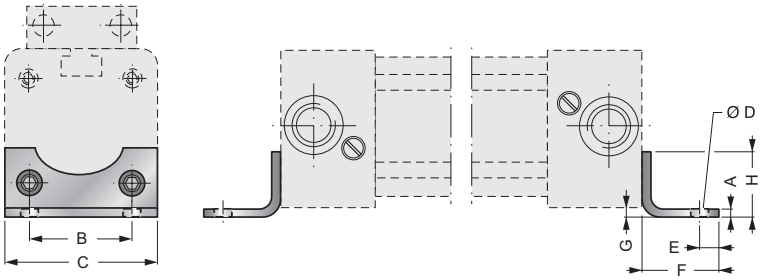
- *All values have been calculated at sppeds of 0,2m/s.*
- *Combined loads*
- *The life of the linear guiding system can be calculated using the following formula:*

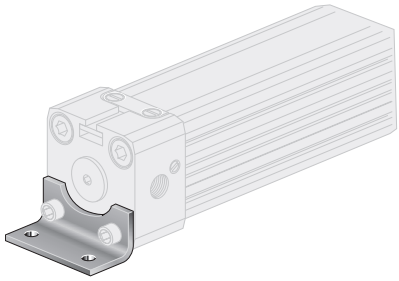
$$\frac{M_a}{M_{a\,max}} + \frac{M_r}{M_{r\,max}} + \frac{M_v}{M_{v\,max}} + \frac{L}{L_{max}} \leq 1$$

ACCESSORI | *MOUNTINGS*

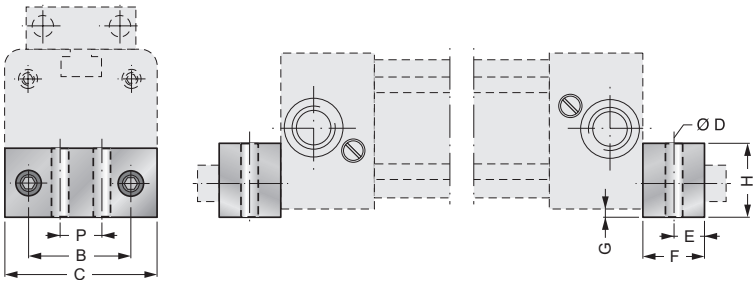
PIEDINO | *END COVER BRACKET (FOOT)*

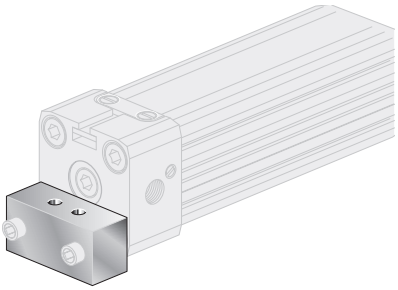
RPA16S - RPA25S*





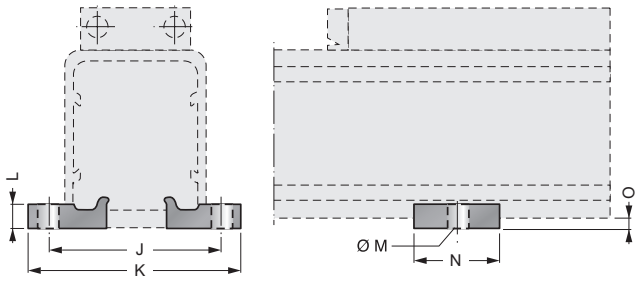
RPA32A - RPA40A*

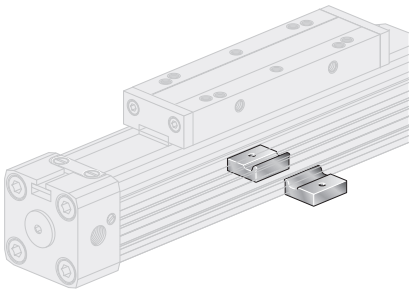




SUPPORTO CENTRALE | *MID SECTION SUPPORT*

RFC16A - RFC25A*





Ø	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
16	1,5	18	26	3,6	4,0	14	1,5	12,5	41,5	53,5	5	ø5,5	20	3	-
25	2,5	27	40	5,5	6,0	22	2	18	48,5	60	6	ø5,5	20	4	-

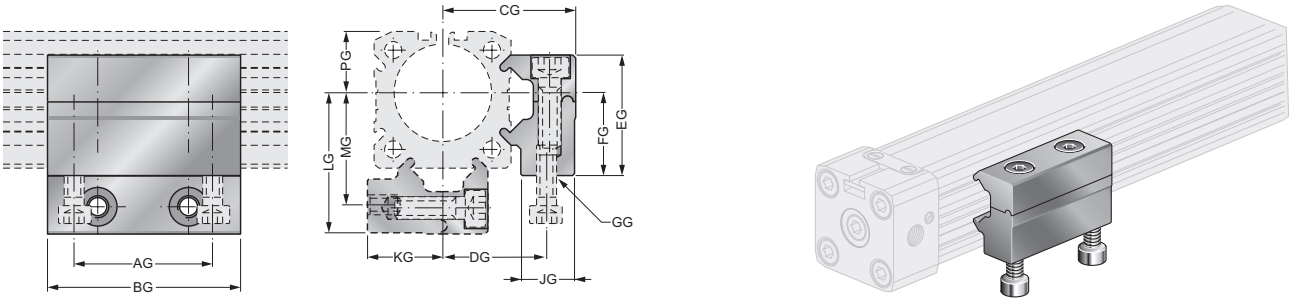
*)Applicazione	*Application No.*
RPA16S = ø16	RFC16A = ø16
RPA25S = ø25	RFC25A = ø25

Ø32 e Ø40 versioni disponibili su richiesta | *other versions available on request*

ACCESSORI | *MOUNTINGS*

SUPPORTO CENTRALE, TIPO G | *MOBILE MID SECTION SUPPORT, G TYPE*

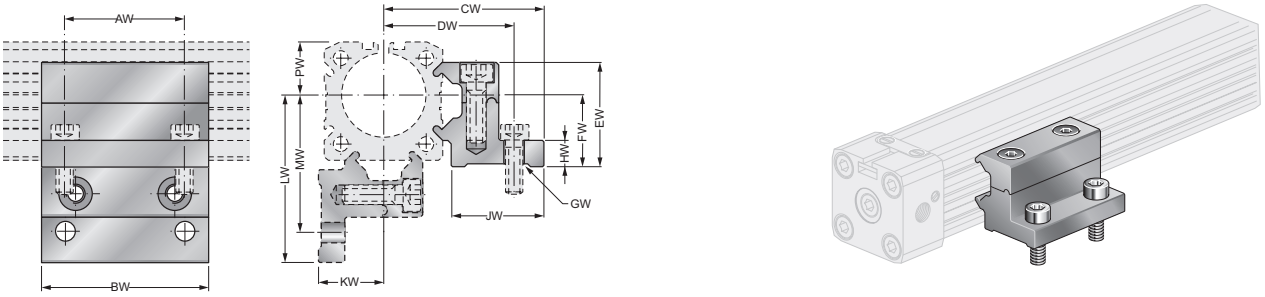
RFG16A - RFG25A - RFG32A



Ø	AG	BG	CG	DG	EG	FG	GG	JG	KG	LG	MG	PG
16	18,0	30,0	27,5	18,4	21,0	15,0	M4	11,5	13,9	29,0	19,7	10,8
25	36,0	50,0	34,5	27,0	31,3	22,0	M5	14,0	20,0	36,5	29,0	16,0
32	36,0	50,0	41,8	34,2	39,0	30,0	M6	14,0	27,6	47,0	39,5	21,5

SUPPORTO CENTRALE, TIPO W | *MOBILE MID SECTION SUPPORT, W TYPE*

RFW16A - RFW25A - RFW32A



Ø	AW	BW	CW	DW	EW	FW	GW	HW	JW	KW	LW	MW	PW
16	18,0	30,0	37,0	32,5	21,0	15,0	ø4,5	6,0	22,4	13,9	38,0	32,9	10,8
25	36,0	50,0	47,5	40,0	31,3	22,0	ø5,5	10,0	26,0	20,0	49,5	42,0	16,0
32	36,0	50,0	56,0	47,4	39,0	30,0	ø6,5	10,0	28,5	27,6	61,0	52,5	21,5

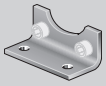
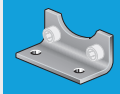
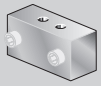
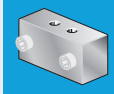
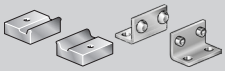
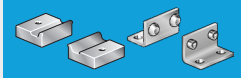
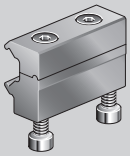
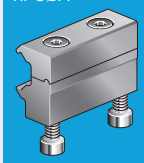
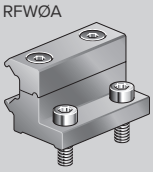
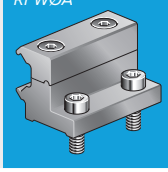
CILINDRO | *CYLINDER*

• • • • Dettagli per la definizione della corsa (0100-5700 mm)
• • • • Ident-figures for stroke definition (0100-5700 mm)

Ø 16-40MM

Tipo	Ø [mm]	Varianti	*Types*	*Ø [mm]*	*Variants*
R1DØ/• • • •	16 25 32 40	**ST** Cilindro senza stelo R1D Unità lineare (Sistema a 2 carrelli scorrevoli)	*R1DØ/• • • •*	*16* *25* *32* *40*	***ST*** *Rodless cylinder R1D* *Linear unit* *(2-Gliding carriage-System)*

ACCESSORI PER CILINDRI | *CYLINDER MOUNTINGS*

TIPO	Ø [mm]	DESCRIZIONE	TYPES	Ø [mm]	DESCRIPTION
Accessori di fissaggio			***Mounting accessories***		
Piedino			***Foot***		
RPAØS 	16 25	Set di montaggio RPAØS: 2 staffe 4 viti 10.9 zincate placcate acc. DIN 912	*RPAØS* 	*16* *25*	*Connection set RPAØS: 2 brackets* *4 zinc-plated 10.9 screws acc. DIN 912*
RPAØA 	32 40	Set di montaggio RPAØA: 2 staffe 4 viti 10.9 zincate placcate acc. DIN 912	*RPAØA* 	*32* *40*	*Connection set RPAØA: 2 brackets* *4 zinc-plated 10.9 screws acc. DIN 912*
Supporto centrale			***Mid-section support***		
RFCØA 	16 25	Set di montaggio RFCØA: Staffe del corpo Alluminio anodizzato	*RFCØA* 	*16* *25*	*Connection Set RFCØA:* *body brackets* *anodised aluminium*
Supporto centrale tipo G			***Mobile mid-section support G type***		
RFGØA 	16 25 32	Colore: naturale Materiale: AL	*RFGØA* 	*16* *25* *32*	*Colour: natur* *Material: AL*
Supporto centrale tipo W			***Mobile mid-section support W type***		
RFWØA 	16 25 32	Colore: naturale Materiale: AL	*RFWØA* 	*16* *25* *32*	*Colour: natur* *Material: AL*