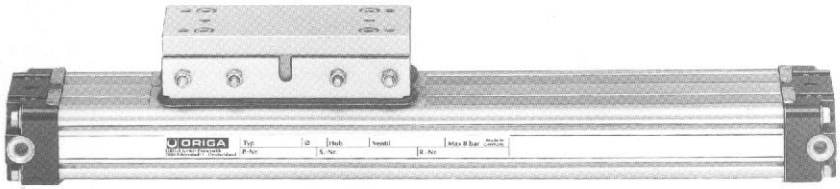
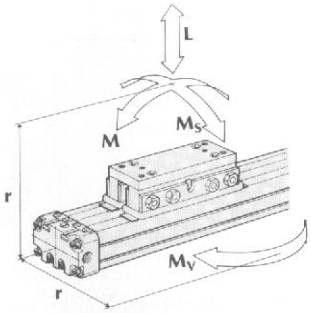
Series P 220

Diameters 2 x 25 and 2 x 32 mm
Optional stroke lengths up to 7,000 mm. (Longer strokes available on request.)



Technical data

Loads, forces, moments

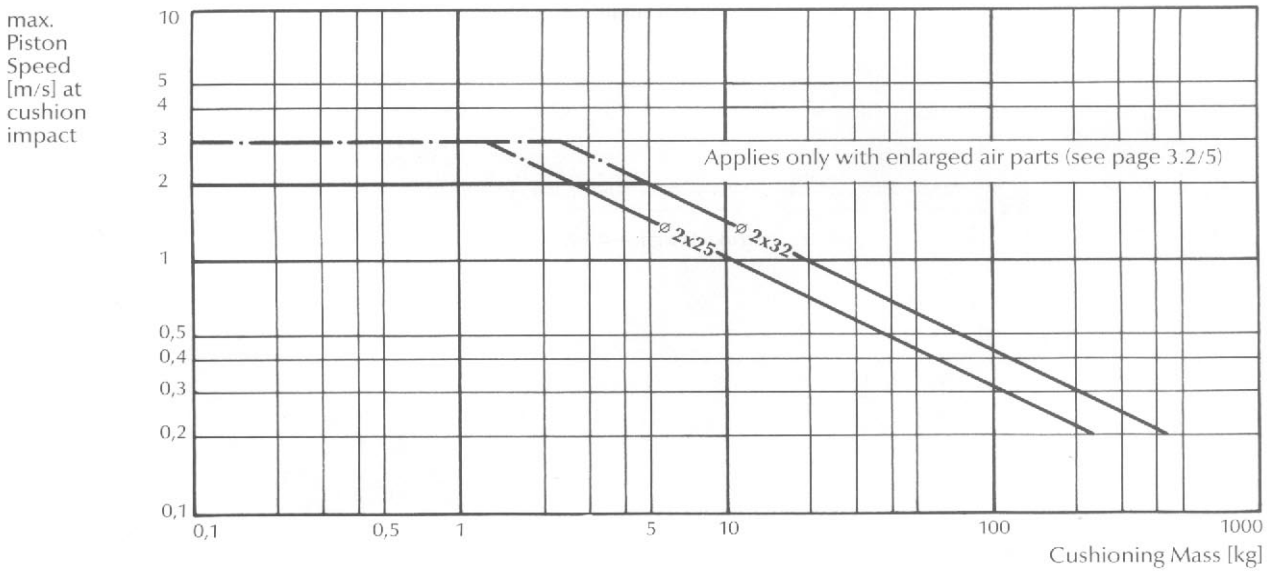


$M = F \cdot r$
$M_S = F \cdot r$
$M_V = F \cdot r$

Cyl. ⌀	effective Force [N] at 6 bar	Cushion Length [mm]	Max. Allowed Bending Moment [Nm] M	M_S	Max. Allowed Torque [Nm] M_V	Max. Allowed Load [N] L
2x25	480	21	30	10	6	600
2x32	820	26	60	20	10	900

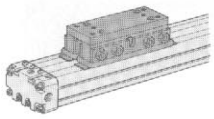
Values are based on light shock free duty and should not be exceeded during piston acceleration.
Side bending moments should be avoided.
Operating pressure max. 8 bar.

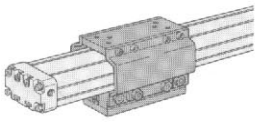
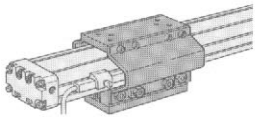
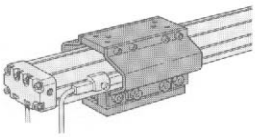
Cushioning Diagram



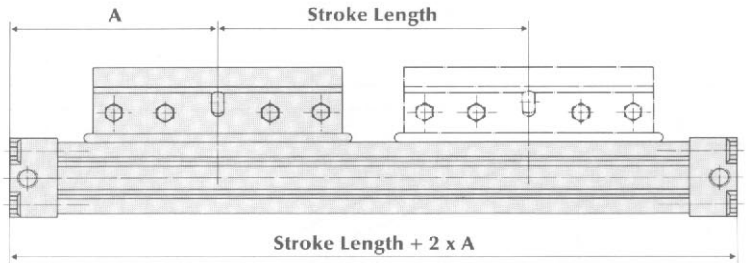
For piston speeds of more than 1 m/s, viton seals are recommended.
If the approved limits are exceeded additional shock absorbers are advisable.
For piston speeds of less than 0,2 m/s slow speed lubrication is recommended.
Maximum seal life will be achieved when piston speeds do not exceed 1 m/s.

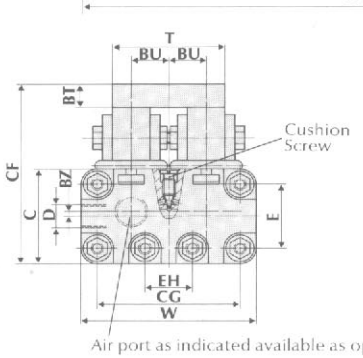
Piston Mountings

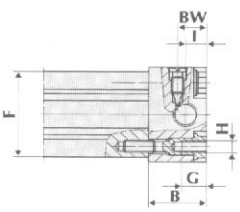
Standard Piston Mounting			Cyl. ⌀	Cylinder weight [kg] for 0 stroke	Cylinder weight [kg] Increase 100 mm stroke	Ident No.
Type P 220/21		Piston mounting No. 21				
		Aluminium	2x25	1,60	0,35	2600
		Mounted during cylinder assembly	2x32	3,40	0,63	3600

Supplementary Piston Mountings			Cyl. ⌀	Weight [kg]	Ident No.
For Type P 220/21 Aluminium Screws (8.8 galvanized) Power take off turned by 180° opposite the piston yokes. These mountings transfer power to the back of the cylinder and allow an installation method which protects the bands from excessive foreign particles (sand, welding sparks, etc).		Piston mounting No. 31			
			2x25	0,46	2610
		For use with cylinders without sensors	2x32	0,98	3610
		Piston mounting No. 33			
			2x25	0,50	2630
		For use with cylinders without sensors one side	2x32	1,10	3630
		Piston mounting No. 34			
			2x25	0,54	2640
		For use with cylinder sensors both sides	2x32	1,20	3640

Overall Dimensions



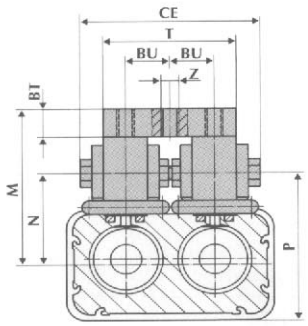


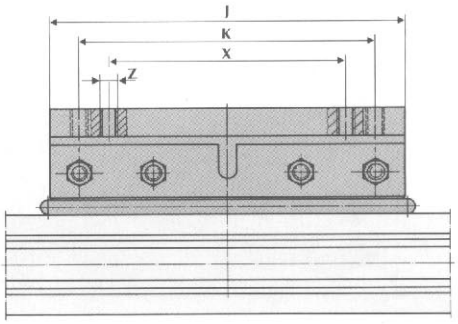


Air port as indicated available as option.

Cyl. ⌀	A	B	C	D	E	F	G	H	I	T	W	BT	BU	BW	BZ	CF	CG	EH
2x25	100	25,5	40	G1/8	27	36	12	M5	8	50	72	10	16,2	11,5	2	74	60	20
2x32	125	31	52	G1/4	36	48	14	M6	10,5	60	90	12	20,2	12,5	2,5	93	74	26

Piston Mounting No. 21

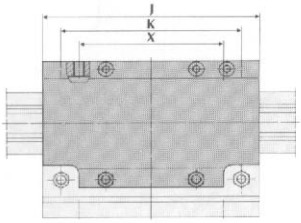


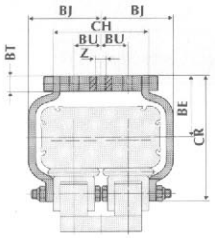


Cyl. ø	J	K	M	N	P	T	X	Z	BT	BU	CE
2x25	120	100	54	33	53	50	80	M6	10	16,2	72
2x32	160	120	67	46	72	60	90	M8	12	20,2	84

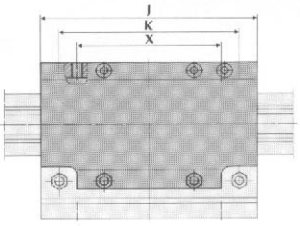
Supplementary Piston Mountings

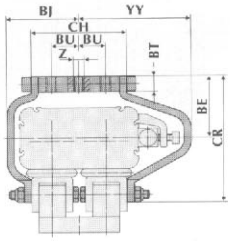
No. 31



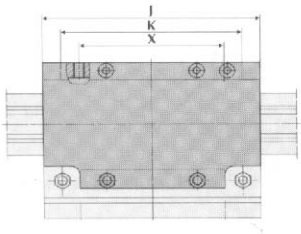


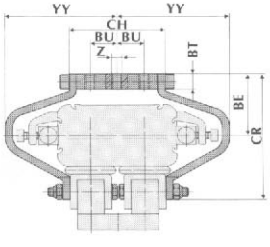
No. 33



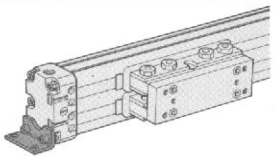
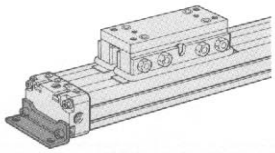
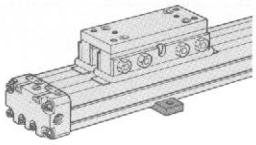


No. 34

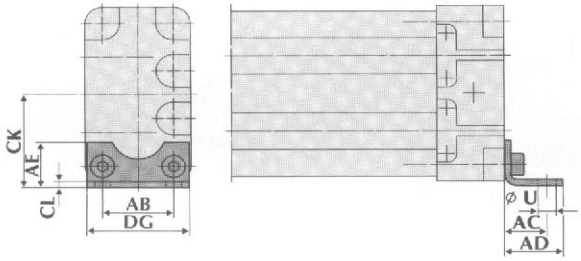




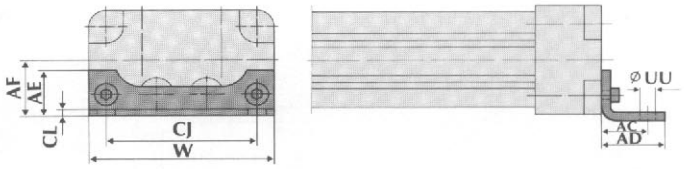
Cyl. ø	J	K	X	Z	BE	BJ	BT	BU	CH	CR	YY
2x25	120	100	80	M6	36	41	10	16	55	73,5	63
2x32	160	120	90	M8	50	53	12	20	70	104	76

Cylinder Mountings			Cyl. ⌀	Weight [kg]	Ident No.
		End cap mounting No. 4 Galvanised steel Including screws (8.8 galvanized)	2x25 2x32	0,030 0,054	2010 3010
		End cap mounting No. 6 Galvanised steel Including screws (8.8 galvanised)	2x25 2x32	0,050 0,080	2030 3030
Soley for support of cylinder Axial forces cannot be transferred		Mid-section support No. 5 Anodised aluminium For placing in the profiled groove of the cylinder barrel	2x25 2x32	0,013 0,022	2020 3020

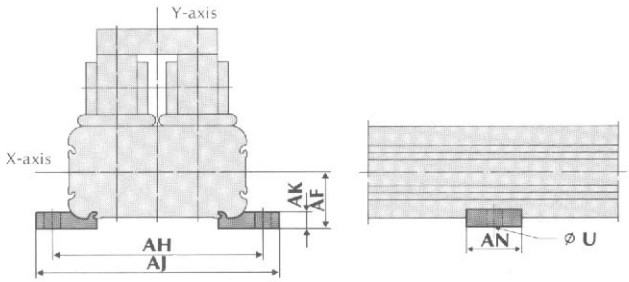
End cap Mounting No. 4



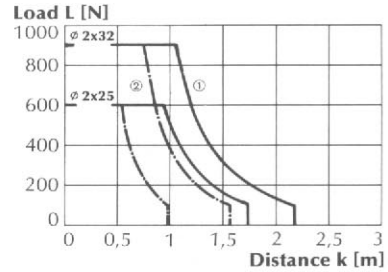
End cap Mounting No. 6



Mid-Section Support No. 5

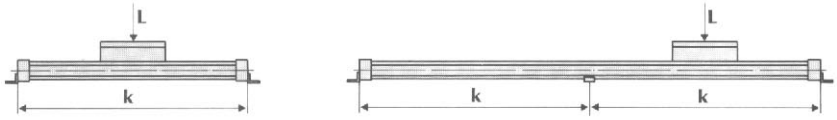


Position of Cylinder Mountings



① ——— Cylinder loads in the X-axis

② —·— Cylinder loads in the Y-axis



Cyl. ø	DG	U	W	AB	AC	AD	AE	AF	AH	AJ	AK	AN	CJ	CK	CL	UU
2x25	39	5,5	72	27	16	22	18	22	80	92	6,5	20	60	38,5	2,5	6,6
2x32	50	6,6	90	36	18	26	20	30	101	123	8,5	20	74	49	3	8,6

End Cap Options

Air Connection in End Cap (see illustration of end cap on page 3.2/2)	**Ident No.**	
Cylinder⌀	**2x25**	**2x32**
End face G 1/8 End face G 1/4	2761 -	- 3761
End face enlarged to G 1/4 End face enlarged to G 3/8	2759 -	- 3759

Optional Features

Viton Seals	**Ident No.**	
End cap and piston	2762	3762
Stainless Steel Parts	**Ident No.**	
Screws (V2 A/1541)	2763	3763
Lubrication	**Ident No.**	
Grease lubrication for slow-speed < 0,2 m/s	2764	3764

Accessories: Proximity switches RS or IS – Please refer to Chapter 4 – Accessories.
Brake on request.