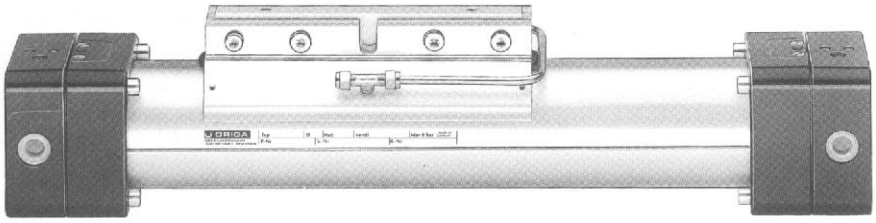
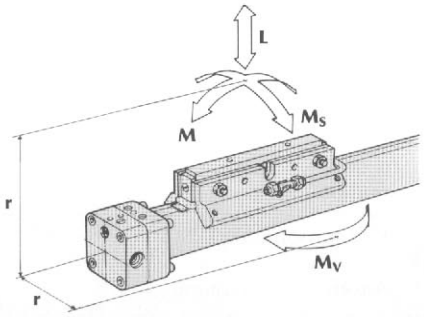
HOERBIGER ORIGA

Series P 140 Cylinder with Brake Diameters 40, 50, 63 and 80 mm
Optional stroke lengths for each diameter up to 12,000 mm.



Technical Data
Loads, forces, moments

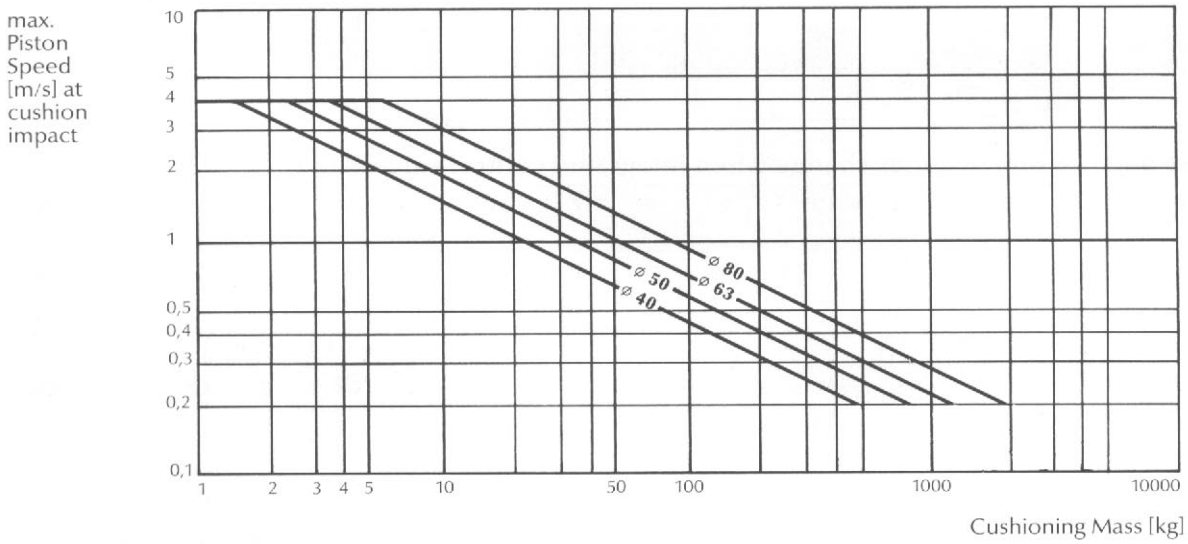


$M = F \cdot r$
$M_S = F \cdot r$
$M_V = F \cdot r$

Cyl. ⌀	effective Force [N] at 6 bar	Cushion Length [mm]	Max. Allowed Bending Moment [Nm] Type P 140 S M	Type P 140 S M_S	Type P 140 L M	Type P 140 L M_S	Max. Allowed Torque [Nm] Type P 140 S M_V	Type P 140 L M_V	Max. Allowed Load [N] L	Max. Braking Force (N)** at 6 bar
40	640	32	60	4	135	8	8	25	750	600-675
50	1000	32	115	7	230	14	15	40	1200	875-1050
63	1550	40	200	8	450	16	24	75	1650	1350-1800
80	2600	44	360	16	720	32	48	140	2400	3400-4000

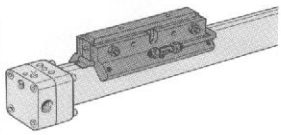
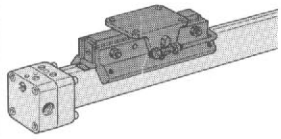
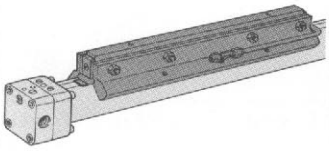
**Oiled surface - dry surface. Values are based on light shock free duty and should not be exceeded during piston acceleration.
Side bending moments should be avoided.
Operating pressure max. 8 bar.

Cushioning Diagram

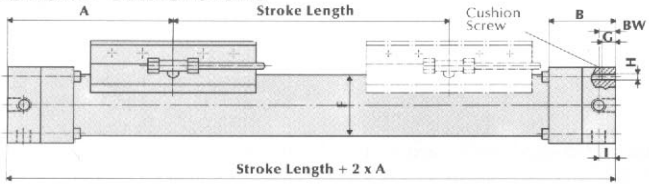


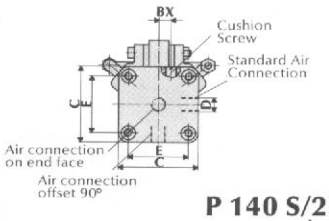
For piston speeds of more than 1 m/s, viton seals are recommended.
If the approved limits are exceeded additional shock absorbers are advisable.
For piston speeds of less than 0,2 m/s slow speed lubrication is recommended.
Maximum seal life will be achieved when piston speeds do not exceed 1 m/s.

Piston Mountings

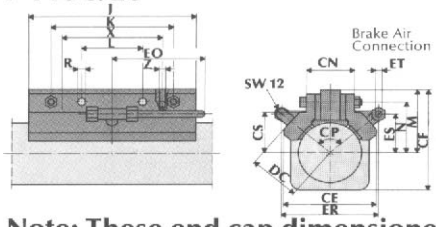
Standard Piston Mountings			Cyl. ⌀	Cylinder weight [kg] for 0 stroke	Increase 100 mm stroke	Ident No.
Type P 140 S/20		Piston mounting S/20	40	4,0	0,36	4820
		Anodised aluminium	50	6,5	0,52	5820
			63	10,5	0,80	6820
		Mounted during cylinder assembly	80	18,6	1,28	8820
Type P 140 S/25		Piston mounting S/25	40	4,3	0,36	4850
		Cast iron	50	7,0	0,52	5850
			63	11,5	0,80	6850
		Carrier pin hardened steel for floating connection	80	19,8	1,28	8850
Type P 140 L/26		Piston mounting L/26	40	6,15	0,36	4860
		Anodised aluminium	50	9,6	0,52	5860
			63	16,2	0,80	6860
		Mounted during cylinder assembly	80	27,1	1,28	8860

Overall Dimensions

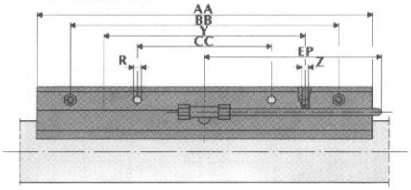




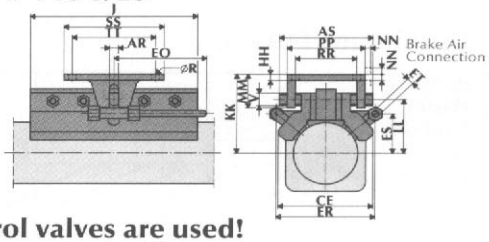
P 140 S/20



P 140 L/26



P 140 S/25

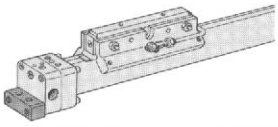
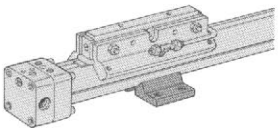


Note: These end cap dimensiones change when integrated control valves are used!

Cyl. ⌀	A (P 140 S)	A (P 140 L)	B	C	D	E	F	G	H	I	J	K	L	M	N
40	150	250	60	72	G 1/4	54	58	15	M 6	15	150	110	55	61	49
50	175	275	70	90	G 1/4	70	71	15	M 6	17,5	180	140	70	69	57
63	215	365	80	106	G 3/8	78	88	20	M 8	20	220	180	90	83	68
80	260	410	100	132	G 1/2	96	112	25	M 10	25	280	240	120	101	83

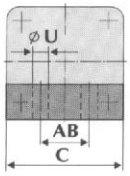
Cyl.⌀	R	V	X	Y	Z x Depth	AA	AR	AS	BB	BW	BX	CC	CE	CF	CN
40	7	12	90	180	M 6 x 12	300	8	84	240	15	11	120	88	97	44
50	7	12	110	240	M 6 x 12	380	8	84	320	17,5	12	160	96	114	44
63	9	16	140	300	M 8 x 16	480	10	90	400	20	15	200	110	136	48
80	11	20	180	360	M 10 x 20	560	13	110	480	25	16	240	136	167	54

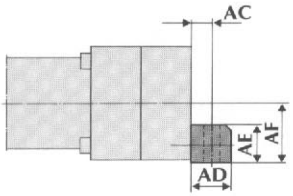
Cyl. ⌀	CP	CS	DC	EO	EP	ER	ES	ET	HH	KK	LL	MM	NN	PP	RR	SS	TT
40	100°	39	50	87	162	98	41	6	6	75	51	32	± 8	70	55	90	75
50	98°	47	53	102	202	101	44	6	6	83	59	32	± 8	70	55	90	75
63	96°	56	61,5	122	252	112	51	6	7	100	70	39	± 10	90	70	120	100
80	94°	68	75	152	292	130	61	6	8	122	86	48	± 12	110	85	150	125

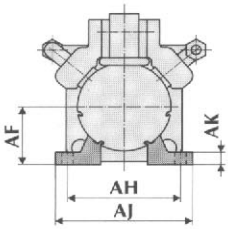
Cylinder Mounting			Cyl. ⌀	Weight [kg]	Ident No.
		End cap mounting No. 3	40	0,1	4010
		Aluminium	50	0,2	5010
			63	0,3	6010
		Screws (8.8 galvanized)	80	0,6	8010
Soley for support of cylinder		Mid-section support No. 8	40	0,10	4040
Axial forces cannot be transferred		Anodised aluminium	50	0,12	5040
			63	0,17	6040
			80	0,33	8040

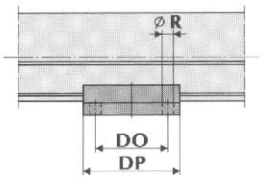
End Cap Mounting No. 3

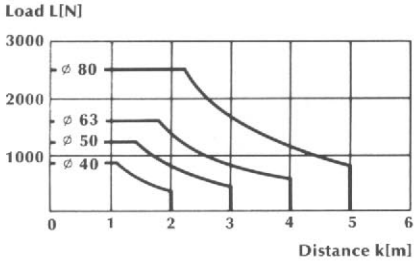
Mid-section Support No. 8

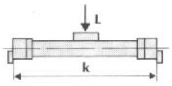


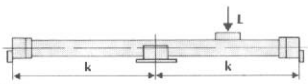












Cyl. ⌀	C	R	U	AB	AC	AD	AE	AF	AH	AJ	AK	DO	DP
40	72	7	9	30	12,5	24	24	38	70	85	8	45	60
50	90	7	9	40	12,5	24	30	48	80	95	8	45	60
63	106	9	11	48	15	30	40	57	95	114	10	45	65
80	132	11	14	60	17,5	35	50	72	120	144	12	55	80

End Cap Options

Air Connection in End Cap (see illustration of end cap on page 3.7/2)		**Ident No.**		
Cylinder ⌀	**40**	**50**	**63**	**80**
Offset by 90°	4751	5751	6751	8751
End face	4752	5752	6752	8752

Optional Features

Viton Seals		**Ident No.**		
End cap and piston Type P 140 S	4771	5771	6771	8771
End cap and piston Type P 140 L	4772	5772	6772	8772
Lubrication		**Ident No.**		
Grease lubrication for slow speed < 0.2 m/s	4791	5791	6791	8791

Accessories: Electrical VOE or pneumatic VOP control valves, proximity switches RS or IS – Please refer to Chapter 4 – Accessories.