

Compact ISO Cylinders - P1P Series

Cylinder mountings

Flange MF1/MF2



Intended for fixed mounting of cylinder. Flange can be fitted to front- or rear end-plates of cylinder.

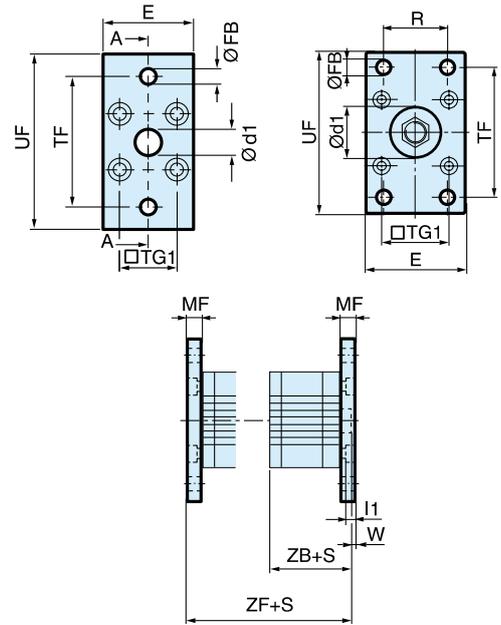
Materials
 Flange: Surface-treated steel
 Mounting screws according to DIN 6912: Zinc-plated steel 8.8

Supplied complete with mounting screws for attachment to cylinder.

Cyl. bore	d1	FB	TG1	E	R	MF	TF	UF	I1	W	ZF*	ZB*
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	12,0	6,6	22,0	36	-	10,0	55,0	70	5,4	4,0	53,0	43,0
25	12,0	6,6	26,0	40	-	10,0	60,0	76	5,4	4,0	55,0	45,0
32	30,0	7,0	32,5	45	32	10,0	64,0	80	5,0	3,0	61,0	41,0
40	35,0	9,0	38,0	52	36	10,0	72,0	90	5,0	3,0	52,0	52,0
50	40,0	9,0	46,5	65	45	12,0	90,0	110	6,5	4,0	65,0	53,0
63	45,0	9,0	56,5	75	50	12,0	100,0	120	6,5	4,0	69,0	57,0
80	45,0	12,0	72,0	95	63	16,0	126,0	150	8,0	6,0	80,0	64,0
100	55,0	14,0	89,0	115	75	16,0	150,0	170	8,0	6,0	93,0	77,0

S = Stroke length

Cyl. bore Ø mm	Weight kg	Order code
20	0,17	P1P-4HMB
25	0,20	P1P-4JMB
32	0,23	P1C-4KMB
40	0,28	P1C-4LMB
50	0,53	P1C-4MMB
63	0,71	P1C-4NMB
80	1,59	P1C-4PMB
100	2,19	P1C-4QMB



Foot brackets MS1



Intended for fixed mounting of cylinder. Angle bracket can be fitted to front- and rear end-plates of cylinder.

Materials
 Foot bracket: Surface-treated steel
 Mounting screws according to DIN 912:
 Zinc-plated steel 8.8

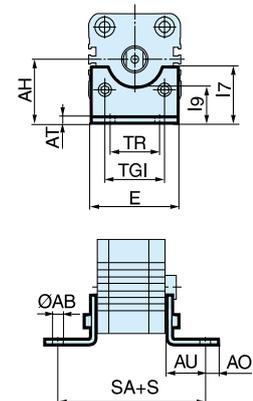
Supplied in pairs with mounting screws for attachment to cylinder.

Cyl. bore Ø mm	Weight kg	Order code
20	0,04**	P1P-4HMF
25	0,05**	P1P-4JMF
32	0,06**	P1C-4KMF
40	0,08**	P1C-4LMF
50	0,16**	P1C-4MMF
63	0,25**	P1C-4NMF*
80	0,50**	P1C-4PMF*
100	0,85**	P1C-4QMF*

** Weight per item

Cyl. bore	AB	TG1	E	TR	AO	AU	AH	I7	AT	I9	SA**
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	6,6	22,0	36	26	6,0	16,0	27	22,0	4,0	17,0	69,0
25	6,6	26,0	40	26	6,0	16,0	30	23,0	4,0	19,0	71,0
32	7,0	32,5	45	32	10,0	24,0	32	30,0	4,5	17,5	92,0
40	9,0	38,0	52	36	8,0	28,0	36	30,0	4,5	18,5	101,0
50	9,0	46,5	65	45	13,0	32,0	45	36,0	5,5	25,0	109,0
63	9,0	56,5	75	50	13,0	32,0	50	35,0	5,5	27,5	113,0
80	12,0	72,0	95	63	14,0	41,0	63	49,0	6,5	40,5	136,0
100	14,0	89,0	115	75	15,0	41,0	71	54,0	6,5	43,5	149,0

S = Stroke length



Cylinder mountings

Pivot bracket with rigid bearing AB7

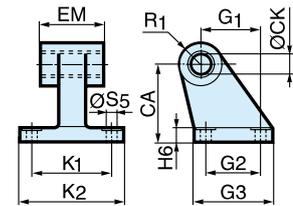


Intended for flexible mounting of cylinder. The pivot bracket can be combined with clevis bracket MP2.

Materials
 Pivot bracket: Surface-treated aluminium, black
 Bearing: Sintered oil-bronze bushing

Cyl. bore Ø mm	Weight kg	Order code
32	0,06	P1C-4KMD
40	0,08	P1C-4LMD
50	0,15	P1C-4MMD
63	0,20	P1C-4NMD
80	0,33	P1C-4PMD
100	0,49	P1C-4QMD

Cyl. bore mm	CK H9 mm	S5 H13 mm	K1 JS14 mm	K2 mm	G1 JS14 mm	G2 JS14 mm	EM mm	G3 mm	CA JS15 mm	H6 mm	R1 mm
32	10	6,6	38	51	21	18	25,5	31	32	8	10
40	12	6,6	41	54	24	22	27,0	35	36	10	11
50	12	9,0	50	65	33	30	31,0	45	45	12	13
63	16	9,0	52	67	37	35	39,0	50	50	12	15
80	16	11,0	66	86	47	40	49,0	60	63	14	15
100	20	11,0	76	96	55	50	59,0	70	71	15	19



Clevis bracket MP2



Intended for flexible mounting of cylinder. Clevis bracket MP2 can be combined with clevis bracket MP4.

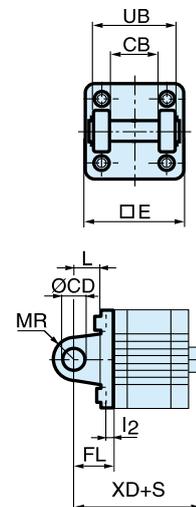
Materials
 Clevis bracket: Surface-treated aluminium, black
 Mounting screws according to DIN 912:
 Zinc-plated steel 8.8
 Pin: surface treated steel

Supplied complete with mounting screws for attachment to cylinder.

Cyl. bore Ø mm	Weight kg	Order code
32	0,08	P1C-4KMT
40	0,11	P1C-4LMT
50	0,14	P1C-4MMT
63	0,29	P1C-4NMT
80	0,36	P1C-4PMT
100	0,64	P1C-4QMT

Cyl. bore mm	E mm	UB h14 mm	CB H14 mm	FL ±0,2 mm	L mm	l2 mm	CD H9 mm	MR mm	XD* mm
32	45,0	45	26,0	22	13	5,5	10	10	73,0
40	52,0	52	28,0	25	16	5,5	12	12	77,0
50	65,0	60	32,0	27	16	6,5	12	12	80,0
63	75,0	70	40,0	32	21	6,5	16	16	89,0
80	95,0	90	50,0	36	22	10,0	16	16	100,0
100	115,0	110	60,0	41	27	10,0	20	20	118,0

S = Stroke length



Cylinder mountings

Clevis bracket MP4



Intended for flexible mounting of cylinder. Clevis bracket MP4 can be combined with clevis bracket MP2.

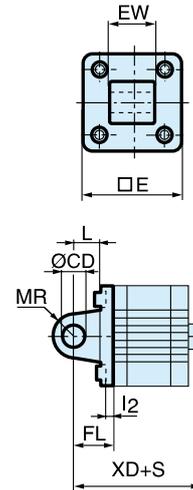
Materials
 Clevis bracket: Surface-treated aluminium, black
 Mounting screws according to DIN 912: Zinc-plated steel 8.8

Supplied complete with mounting screws for attachment to cylinder.

Cyl. bore mm	E mm	EW mm	FL mm	L mm	I2 mm	CD mm	MR mm	XD* mm
20	34,0	16,0	±0,2 20	14	2,6	8	8	63,0
25	38,0	16,0	±0,2 20	14	2,6	8	8	65,0
32	45,0	26,0	±0,2 22	13	5,5	10	10	73,0
40	52,0	28,0	±0,2 25	16	5,5	12	12	77,0
50	65,0	32,0	±0,2 27	16	6,5	12	12	80,0
63	75,0	40,0	±0,2 32	21	6,5	16	16	89,0
80	95,0	50,0	±0,2 36	22	10,0	16	16	100,0
100	115,0	60,0	±0,2 41	27	10,0	20	20	118,0

S = Stroke length

Cyl. bore Ø mm	Weight kg	Order code
20	0,04	P1P-4HME
25	0,05	P1P-4JME
32	0,09	P1C-4KME
40	0,13	P1C-4LME
50	0,17	P1C-4MME
63	0,36	P1C-4NME
80	0,46	P1C-4PME
100	0,83	P1C-4QME



Clevis bracket AB6



Intended for flexible mounting of cylinder. Clevis bracket GA can be combined with pivot bracket with swivel bearing, swivel eye bracket and swivel rod eye.

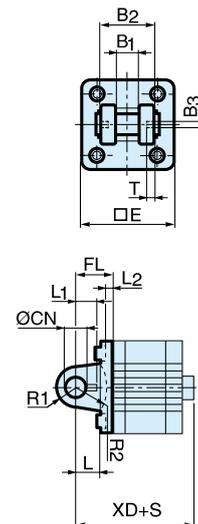
Materials
 Clevis bracket: Surface-treated aluminium, black
 Pin: Surface hardened steel
 Locking pin: Spring steel
 Circlips according to DIN 471: Spring steel
 Mounting screws acc. to DIN 912: Zinc-plated steel 8.8

Supplied complete with mounting screws for attachment to cylinder.

Cyl. bore mm	E mm	B2 mm	B1 mm	T mm	B3 mm	R2 mm	L1 mm	FL mm	I2 mm	L mm	ØCN mm	R1 mm	XD* mm
32	45	34	14	3	3,3	17	11,5	±0,2 22	5,5	12	10	11	73,0
40	52	40	16	4	4,3	20	12,0	±0,2 25	5,5	15	12	13	77,0
50	65	45	21	4	4,3	22	14,0	±0,2 27	6,5	17	16	18	80,0
63	75	51	21	4	4,3	25	14,0	±0,2 32	6,5	20	16	18	89,0
80	95	65	25	4	4,3	30	16,0	±0,2 36	10,0	20	20	22	100,0
100	115	75	25	4	4,3	32	16,0	±0,2 41	10,0	25	20	22	118,0

S = Stroke length

Cyl. bore Ø mm	Weight kg	Order code
32	0,09	P1C-4KMCA
40	0,13	P1C-4LMCA
50	0,17	P1C-4MMCA
63	0,36	P1C-4NMCA
80	0,58	P1C-4PMCA
100	0,89	P1C-4QMCA



Stainless steel Pin Set AB6

Materials
 Pin: Stainless steel
 Locking pin: Stainless steel
 Circlips according to DIN 471: Stainless steel

Cyl. bore Ø mm	Weight kg	Order code
32	0,05	9301054311
40	0,06	9301054312
50	0,07	9301054313
63	0,07	9301054314
80	0,17	9301054315
100	0,31	9301054316

Cylinder mountings

Pivot bracket with swivel bearing CS7

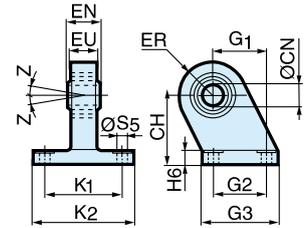


Intended for use together with clevis bracket GA.

Material
 Pivot bracket: Surface-treated steel, black
 Swivel bearing according to DIN 648K: Hardened steel

Cyl. bore Ø mm	Weight kg	Order code
32	0,18	P1C-4KMA
40	0,25	P1C-4LMA
50	0,47	P1C-4MMA
63	0,57	P1C-4NMA
80	1,05	P1C-4PMA
100	1,42	P1C-4QMA

Cyl. bore mm	CN mm	S5 mm	K1 mm	K2 mm	EU mm	G1 mm	G2 mm	EN mm	G3 mm	CH mm	H6 mm	ER mm	Z °
32	10	6,6	38	51	10,5	21	18	14	31	32	10	16	4°
40	12	6,6	41	54	12,0	24	22	16	35	36	10	18	4°
50	16	9,0	50	65	15,0	33	30	21	45	45	12	21	4°
63	16	9,0	52	67	15,0	37	35	21	50	50	12	23	4°
80	20	11,0	66	86	18,0	47	40	25	60	63	14	28	4°
100	20	11,0	76	96	18,0	55	50	25	70	71	15	30	4°



Swivel eye bracket MP6



Intended for use together with clevis bracket GA

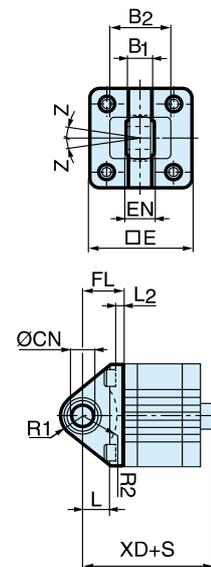
Material
 Bracket: Surface-treated aluminium, black
 Swivel bearing acc. to DIN 648K: Hardened steel

Supplied complete with mounting screws for attachment to cylinder.

Cyl. bore Ø mm	Weight kg	Order code
32	0,08	P1C-4KMSA
40	0,11	P1C-4LMSA
50	0,20	P1C-4MMSA
63	0,27	P1C-4NMSA
80	0,52	P1C-4PMSA
100	0,72	P1C-4QMSA

Cyl. bore mm	E mm	B1 mm	B2 mm	EN mm	R1 mm	R2 mm	FL mm	I2 mm	L mm	CN mm	XD* mm	Z °
32	45	10,5	38	14	16	14	22	5,5	12	10	73,0	4°
40	52	12,0	44	16	18	16	25	5,5	15	12	77,0	4°
50	65	15,0	51	21	21	19	27	6,5	15	16	80,0	4°
63	75	15,0	56	21	23	22	32	6,5	20	16	89,0	4°
80	95	18,0	-	25	29	-	36	10,0	20	20	100,0	4°
100	115	18,0	-	25	31	-	41	10,0	25	20	118,0	4°

S=Stroke length



Cylinder mountings

3 and 4 positions flange JP1

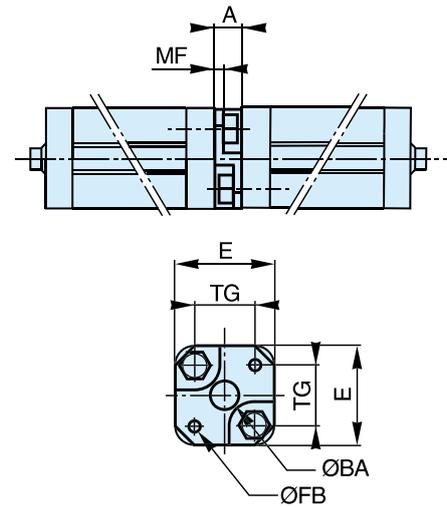


Mounting kit for back to back mounted cylinders, 3 and 4 position cylinders.

Material:
Mounting: Aluminium
Mounting screws: Zinc-plated steel 8.8

Cyl. bore Ø mm	Weight kg	Order code
32	0,060	P1E-6KB0
40	0,078	P1E-6LB0
50	0,162	P1E-6MB0
63	0,194	P1E-6NB0
80	0,450	P1E-6PB0
100	0,672	P1E-6QB0

Cyl. bore mm	E mm	TG mm	ØFB mm	MF mm	A mm	ØBA mm
32	50	32,5	6,5	5	16	30
40	60	38,0	6,5	5	16	35
50	66	46,5	8,5	6	20	40
63	80	56,5	8,5	6	20	45
80	100	72,0	10,5	8	25	45
100	118	89,0	10,5	8	25	55



Piston rod mountings

Swivel rod eye AP6



Swivel rod eye for articulated mounting of cylinder. Swivel rod eye can be combined with clevis bracket GA. Maintenance-free.

Materials
Swivel rod eye: Zinc-plated steel
Swivel bearing according to DIN 648K: Hardened steel

Stainless steel swivel rod eye AP6



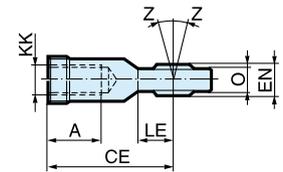
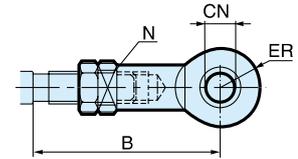
Stainless-steel swivel rod eye for articulated mounting of cylinder. Swivel rod eye can be combined with clevis bracket GA. Maintenance-free.

Materials
Swivel rod eye: Stainless steel
Swivel bearing according to DIN 648K: Stainless steel

Use stainless steel nut with stainless steel swivel rod eye.

Cyl. bore Ø mm	Weight kg	Order code
20 / 25	0,045	P1A-4HRS
32 / 40	0,08	P1C-4KRS
50 / 63	0,12	P1C-4LRS
80 / 100	0,25	P1C-4MRS

Cyl. bore Ø mm	Weight kg	Order code
20 / 25	0,045	P1S-4HRT
32 / 40	0,08	P1S-4JRT
50 / 63	0,12	P1S-4LRT
80 / 100	0,25	P1S-4MRT



According to ISO 8139

Cyl. bore mm	A mm	B min mm	B max mm	CE mm	CN H9 mm	EN h12 mm	ER mm	KK	LE mm	N min mm	O mm	Z
20 / 25	12	40,0	45	36	8	12	12	M8x1,25	12	13	9,0	12°
32 / 40	20	48,0	55	43	10	14	14	M10x1,25	15	17	10,5	12°
50 / 63	22	56,0	62	50	12	16	16	M12x1,25	17	19	12,0	12°
80 / 100	28	72,0	80	64	16	21	21	M16x1,5	22	22	15,0	15°

Clevis AP2



Clevis for articulated mounting of cylinder.

Material
Clevis, clip: Galvanized steel
Pin: Hardened steel

Cyl. bore Ø mm	Weight kg	Order code
20 / 25	0,045	P1A-4HRC
32 / 40	0,09	P1C-4KRC
50 / 63	0,15	P1C-4LRC
80 / 100	0,35	P1C-4MRC

Stainless steel clevis AP2

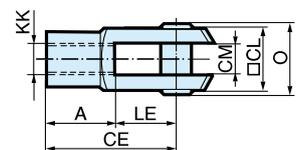
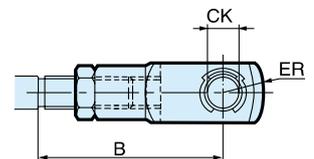


Stainless-steel clevis for articulated mounting of cylinder.

Material
Clevis: Stainless steel
Pin: Stainless steel
Circlips according to DIN 471: Stainless steel

Use stainless steel nut with stainless steel swivel rod eye.

Cyl. bore Ø mm	Weight kg	Order code
20 / 25	0,045	P1S-4HRD
32 / 40	0,09	P1S-4JRD
50 / 63	0,15	P1S-4LRD
80 / 100	0,35	P1S-4MRD



According to ISO 8140

Cyl. bore mm	A mm	B min mm	B max mm	CE mm	CK h11/E9 mm	CL mm	CM mm	ER mm	KK	LE mm	O mm
20 / 25	16	36,0	41	32	8	16	8	-	M8x1,25	16	24,0
32 / 40	20	45,0	52	40	10	20	10	16	M10x1,25	20	28,0
50 / 63	24	54,0	60	48	12	24	12	19	M12x1,25	24	32,0
80 / 100	32	72,0	80	64	16	32	16	25	M16x1,5	32	41,5

Piston rod mountings

Flexo coupling PM5



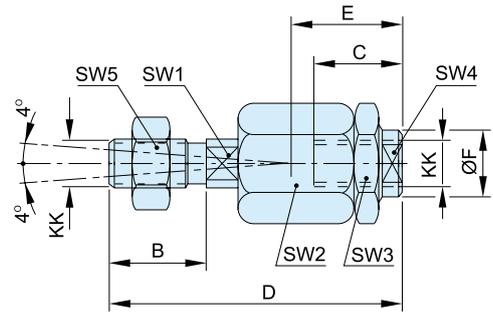
Flexo coupling for articulated mounting of piston rod. Flexo fitting is intended to take up axial angle errors within a range of ±4°.

Material
Flexo coupling, nut: Zinc-plated steel

Supplied complete with galvanized adjustment nut.

Cyl. bore Ø mm	Weight kg	Order code
20 / 25	0,06	P1C-4HRF
32 / 40	0,23	P1C-4KRF
50 / 63	0,23	P1C-4LRF
80 / 100	0,65	P1C-4MRF

Cyl. bore mm	KK mm	B mm	C mm	D mm	E mm	ØF mm	SW1 mm	SW2 mm	SW3 mm	SW4 mm	SW5 mm
20 / 25	M8x1.25	16	14	55	20	12.4	7	17	17	10	13
32 / 40	M10x1.25	20	23	73	31	21	12	30	30	19	17
50 / 63	M12x1.5	24	23	77	31	21	12	30	30	19	19
80 / 100	M16x1.5	32	32	108	45	33.5	19	41	41	30	24



Nut MR9



Intended for fixed mounting of accessories to the piston rod. Material: Zinc-plated steel

All P1D cylinders are delivered with a zinc-plated steel piston rod nut.

Supplied as pack of 10 off

Cyl. bore Ø mm	Weight * kg	Order code
20 / 25	0,005	P14-4HRPZ
32 / 40	0,007	P14-4KRPZ
50 / 63	0,021	P14-4LRPZ
80 / 100	0,040	P14-4MRPZ

* Weight per item

Stainless steel nut MR9



Intended for fixed mounting of accessories to the piston rod.

Material: Stainless steel A2

All P1D cylinders are delivered with a zinc-plated steel piston rod nut.

Supplied as pack of 10 off

Cyl. bore Ø mm	Weight * kg	Order code
20 / 25	0,005	P14-4HRPS
32 / 40	0,007	P14-4KRPS
50 / 63	0,021	P14-4LRPS
80 / 100	0,040	P14-4MRPS

* Weight per item

According to DIN 439 B

Cyl. bore mm	d mm	M mm	S mm
20 / 25	M8x1,25		
32 / 40	M10x1,25	5,0	17
50 / 63	M12x1,25	6,0	19
80 / 100	M16x1,5	10,0	30

