

P1D-T Pneumatic Cylinders

According to
ISO 15552



The P1D-T range of cylinders is intended for use in a wide range of applications. Careful design and high quality manufacture throughout ensure long service life and optimum economy. Mounting dimensions fully in accordance with ISO 15552 (ISO 6431 and CETOP RP52P) greatly simplifies installation and world-wide interchangeability.

- Bore sizes Ø32 - Ø320mm
- Stroke lengths 5 to 2800 mm
- Magnetic piston as standard
- Adjustable cushioning as standard
- High and Low temperature versions
- ATEX version
- Special version on request

P1D Tie Rod

The P1D is available in a tie-rod version, based on the same high level technology. This future-proof cylinder is the perfect choice wherever a tie-rod cylinder is needed. Mounting dimensions fully in accordance with ISO 15552 (ISO 6431 and CETOP RP52P) greatly simplifies installation and world-wide interchangeability.

- Bore sizes Ø32 - Ø125mm
- Stroke lengths 5mm - 2800mm
- Magnetic piston as standard
- Adjustable cushioning as standard
- High and low temperature versions



Cyl. bore mm	Stroke mm	Order code
32 Conn. G1/8	25	P1D-T032MS-0025
	40	P1D-T032MS-0040
	50	P1D-T032MS-0050
	80	P1D-T032MS-0080
	100	P1D-T032MS-0100
	125	P1D-T032MS-0125
	160	P1D-T032MS-0160
	200	P1D-T032MS-0200
	250	P1D-T032MS-0250
	320	P1D-T032MS-0320
	400	P1D-T032MS-0400
500	P1D-T032MS-0500	
40 Conn. G1/4	25	P1D-T040MS-0025
	40	P1D-T040MS-0040
	50	P1D-T040MS-0050
	80	P1D-T040MS-0080
	100	P1D-T040MS-0100
	125	P1D-T040MS-0125
	160	P1D-T040MS-0160
	200	P1D-T040MS-0200
	250	P1D-T040MS-0250
	320	P1D-T040MS-0320
	400	P1D-T040MS-0400
500	P1D-T040MS-0500	
50 Conn. G1/4	25	P1D-T050MS-0025
	40	P1D-T050MS-0040
	50	P1D-T050MS-0050
	80	P1D-T050MS-0080
	100	P1D-T050MS-0100
	125	P1D-T050MS-0125
	160	P1D-T050MS-0160
	200	P1D-T050MS-0200
	250	P1D-T050MS-0250
	320	P1D-T050MS-0320
	400	P1D-T050MS-0400
500	P1D-T050MS-0500	
63 Conn. G3/8	25	P1D-T063MS-0025
	40	P1D-T063MS-0040
	50	P1D-T063MS-0050
	80	P1D-T063MS-0080
	100	P1D-T063MS-0100
	125	P1D-T063MS-0125
	160	P1D-T063MS-0160
	200	P1D-T063MS-0200
	250	P1D-T063MS-0250
	320	P1D-T063MS-0320
	400	P1D-T063MS-0400
500	P1D-T063MS-0500	

Cyl. bore mm	Stroke mm	Order code
80 Conn. G3/8	25	P1D-T080MS-0025
	40	P1D-T080MS-0040
	50	P1D-T080MS-0050
	80	P1D-T080MS-0080
	100	P1D-T080MS-0100
	125	P1D-T080MS-0125
	160	P1D-T080MS-0160
	200	P1D-T080MS-0200
	250	P1D-T080MS-0250
	320	P1D-T080MS-0320
	400	P1D-T080MS-0400
500	P1D-T080MS-0500	
100 Conn. G1/2	25	P1D-T100MS-0025
	40	P1D-T100MS-0040
	50	P1D-T100MS-0050
	80	P1D-T100MS-0080
	100	P1D-T100MS-0100
	125	P1D-T100MS-0125
	160	P1D-T100MS-0160
	200	P1D-T100MS-0200
	250	P1D-T100MS-0250
	320	P1D-T100MS-0320
	400	P1D-T100MS-0400
500	P1D-T100MS-0500	
125 Conn. G1/2	25	P1D-T125MS-0025
	40	P1D-T125MS-0040
	50	P1D-T125MS-0050
	80	P1D-T125MS-0080
	100	P1D-T125MS-0100
	125	P1D-T125MS-0125
	160	P1D-T125MS-0160
	200	P1D-T125MS-0200
	250	P1D-T125MS-0250
	320	P1D-T125MS-0320
	400	P1D-T125MS-0400
500	P1D-T125MS-0500	

The cylinders are supplied complete with one zinc plated steel piston rod nut.

For mountings see pages 29 to 36.

Sensors



For sensors see page 77.

P1D-T Large Bore Cylinders

The P1D-T range of tie rod cylinders is intended for use in a wide range of applications. Careful design and high quality manufacture throughout ensure long service life and optimum economy. Mounting dimensions fully in accordance with ISO 15552 (ISO 6431 and CETOP RP52P) greatly simplifies installation and world-wide interchangeability.



- Bore sizes Ø160 - Ø320mm
- Stroke lengths 10mm - 2000mm
- Magnetic piston as standard
- Adjustable cushioning as standard
- High temperature version
- ATEX certified (add -EXNN on order code)

Operating information

Working pressure:	Max 10 bar
Seals / Temperature options	
Standard:	-20°C to +80°C
High temperature:	-10°C to +150°C
ATEX approval:	CE Ex IIGD c T4 120°C

For more information see www.parker.com/euro_pneumatic

P1D-T - Tie Rod

Ø160mm

Stroke mm	Order code
50	P1D-T160MS-0050
80	P1D-T160MS-0080
100	P1D-T160MS-0100
125	P1D-T160MS-0125
160	P1D-T160MS-0160
200	P1D-T160MS-0200
250	P1D-T160MS-0250
320	P1D-T160MS-0320
400	P1D-T160MS-0400
500	P1D-T160MS-0500
800	P1D-T160MS-0800
1000	P1D-T160MS-1000

Ø200mm

Stroke mm	Order code
50	P1D-T200MS-0050
80	P1D-T200MS-0080
100	P1D-T200MS-0100
125	P1D-T200MS-0125
160	P1D-T200MS-0160
200	P1D-T200MS-0200
250	P1D-T200MS-0250
320	P1D-T200MS-0320
400	P1D-T200MS-0400
500	P1D-T200MS-0500
800	P1D-T200MS-0800
1000	P1D-T200MS-1000

Ø250mm

Stroke mm	Order code
50	P1D-T250MS-0050
80	P1D-T250MS-0080
100	P1D-T250MS-0100
125	P1D-T250MS-0125
160	P1D-T250MS-0160
200	P1D-T250MS-0200
250	P1D-T250MS-0250
320	P1D-T250MS-0320
400	P1D-T250MS-0400
500	P1D-T250MS-0500
800	P1D-T250MS-0800
1000	P1D-T250MS-1000

Ø320mm

Stroke mm	Order code
50	P1D-T320MS-0050
80	P1D-T320MS-0080
100	P1D-T320MS-0100
125	P1D-T320MS-0125
160	P1D-T320MS-0160
200	P1D-T320MS-0200
250	P1D-T320MS-0250
320	P1D-T320MS-0320
400	P1D-T320MS-0400
500	P1D-T320MS-0500
800	P1D-T320MS-0800
1000	P1D-T320MS-1000

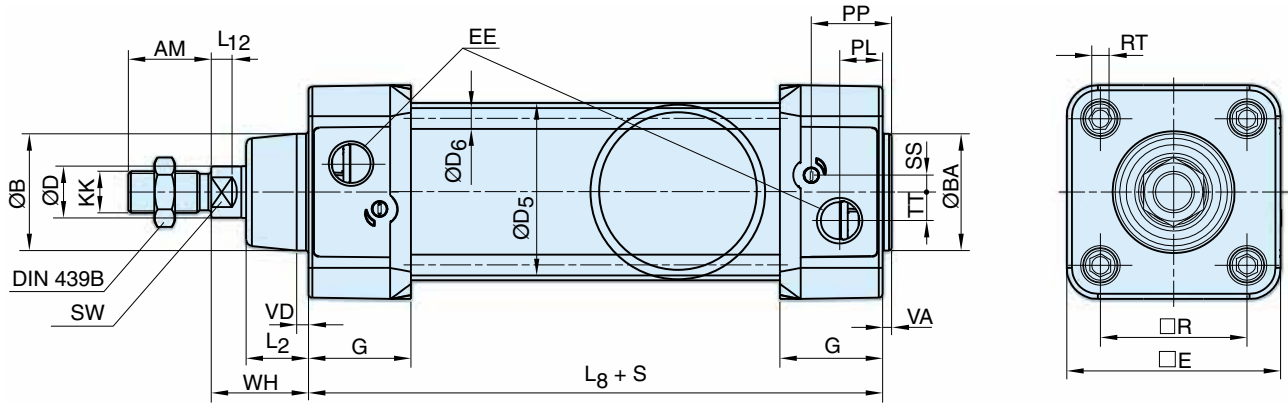
The cylinders are supplied complete with a zinc plated steel piston rod nut.

Sensors

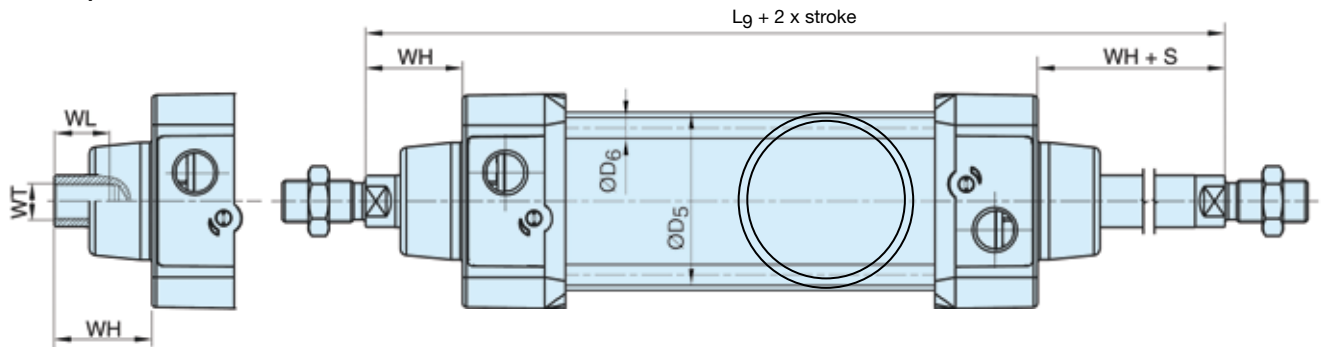


For sensors see page 77.

P1D-T Tie rod Standard temperature



Internal piston rod thread



Dimensions

Cylinder bore mm	AM mm	B mm	BA mm	BG mm	D mm	D4 mm	E mm	EE mm	G mm	KK	L2 mm	L8 mm	L9 mm	L12 mm
32	22	30	30	16	12	45,0	50,0	G1/8	28,5	M10x1,25	16,0	94	146	6,0
40	24	35	35	16	16	52,0	57,4	G1/4	33,0	M12x1,25	19,0	105	165	6,5
50	32	40	40	16	20	60,7	69,4	G1/4	33,5	M16x1,5	24,0	106	180	8,0
63	32	45	45	16	20	71,5	82,4	G3/8	39,5	M16x1,5	24,0	121	195	8,0
80	40	45	45	17	25	86,7	99,4	G3/8	39,5	M20x1,5	30,0	128	220	10,0
100	40	55	55	17	25	106,7	116,0	G1/2	44,5	M20x1,5	32,4	138	240	14,0
125	54	60	60	20	32	134,0	139,0	G1/2	51,0	M27x2	45,0	160	290	18,0

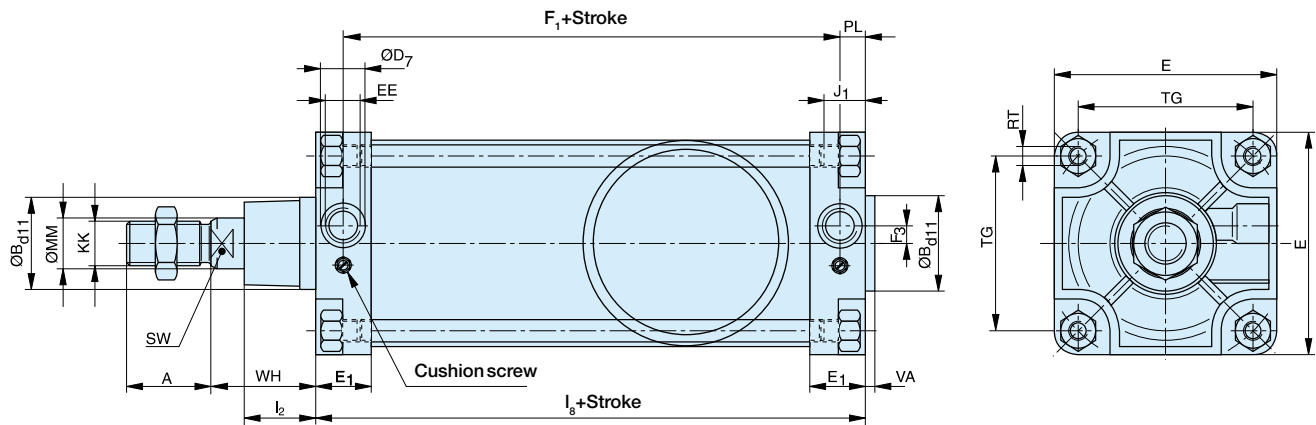
Cylinder bore mm	OA mm	PL mm	PP mm	R mm	RT	SS mm	SW mm	TT mm	VA mm	VD mm	WH mm	WL mm	WT mm
32	6,0	13,0	21,8	32,5	M6	4,0	10	4,5	3,5	4,5	26	21	M8x1
40	6,0	14,0	21,9	38,0	M6	8,0	13	5,5	3,5	4,5	30	23	M10x1,25
50	8,0	14,0	23,0	46,5	M8	4,0	17	7,5	3,5	5,0	37	31	M14x1,5
63	8,0	16,4	27,4	56,5	M8	6,5	17	11,0	3,5	5,0	37	31	M14x1,5
80	6,0	16,0	30,5	72,0	M10	0	22	15,0	3,5	4,0	46	39	M18x1,5
100	6,0	18,0	35,8	89,0	M10	0	22	20,0	3,5	4,0	51	39	M18x1,5
125	8,0	28,0	40,5	110,0	M12	0	27	17,5	5,5	6,0	65	53	M24x2

S=Stroke

Tolerances

Cylinder bore mm	B	BA	L ₃ mm	L ₉ mm	R mm	Stroke tolerance up to stroke 500 mm	Stroke tolerance for stroke over 500 mm
32	d11	d11	±0,4	±2	±0,5	+0,3/+2,0	+0,3/+3,0
40	d11	d11	±0,7	±2	±0,5	+0,3/+2,0	+0,3/+3,0
50	d11	d11	±0,7	±2	±0,6	+0,3/+2,0	+0,3/+3,0
63	d11	d11	±0,8	±2	±0,7	+0,3/+2,0	+0,3/+3,0
80	d11	d11	±0,8	±3	±0,7	+0,3/+2,0	+0,3/+3,0
100	d11	d11	±1,0	±3	±0,7	+0,3/+2,0	+0,3/+3,0
125	d11	d11	±1,0	±3	±1,1	+0,3/+2,0	+0,3/+3,0

P1D-T Series



Note: for bore size 320mm, front air port in on the bottom of the axis of the cylinder and the cushioning screw on the top

Dimension Table (mm)

Cyl. Ø	A	ØB _{d11}	ØD ₇	E	E ₁	F ₁ + Stroke	F ₃	J ₁ max.	I ₂	I ₈ + Stroke	EE	KK	MM	PL	RT	SW	TG	VA	WH
160	72	65	33	180	45	130	11	23	50	180	G3/4	M36x2	40	25	M16	36	140	6	80
200	72	75	33	220	45	130	15	23	60	180	G3/4	M36x2	40	25	M16	36	175	6	95
250	84	90	40	280	64	136	21	27	70	200	G1	M42x2	50	32	M20	46	280	10	105
320	96	110	-	340	56	164	-20*/20	28	89,5	220	G1	M48x2	63	28	M24	55	340	10	120

Weight (mass) kg

Cylinder version	Cylinder Diameter							
	Ø160		Ø200		Ø250		Ø320	
	1*	2*	1*	2*	1*	2*	1*	2*
Standard Type P1D-T	12.500	2.050	20.000	2.200	35.000	4.000	66.000	6.000

* 1 = Weight for cylinder with 100 mm stroke

2 = Weight for further 100 mm stroke length

Tolerances

Cylinder bore mm	L ₈ mm	TG mm	Stroke tolerance up to stroke 500 mm	Stroke tolerance for stroke over 500 mm
160	±1,1	±1,1	+0,3/+2,0	+0,3/+3,0
200	±1,6	±1,1	+0,3/+2,0	+0,3/+3,0
250	±1,6	±1,5	+0,3/+2,0	+0,3/+3,0
320	±2,2	±1,5	+0,3/+2,0	+0,3/+3,0

Cylinder mountings

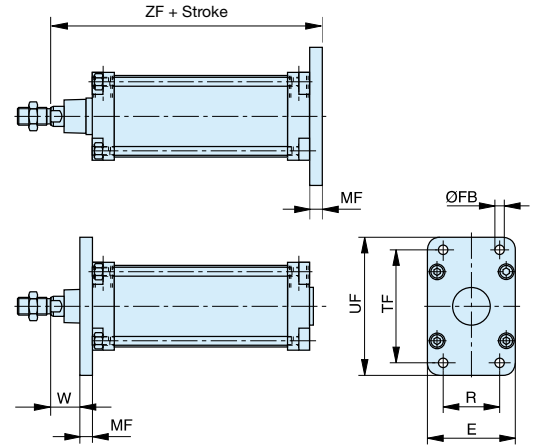
Flange MF1/MF2



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

Materials
Flange: Passivated steel
Mounting screws acc. to DIN 6912:
Zinc-plated steel 8.8

Supplied complete with mounting screws for attachment to cylinder.



Bore mm	ZF mm	MF mm	W mm	UF mm	E mm	TF mm	R mm	ØFB mm	Weight kg	Order code
32	130,0	10,0	16,0	80,0	45,0	64,0	32,0	7,0	0,23	P1C-4KMB
40	145,0	10,0	20,0	80,0	52,0	72,0	36,0	9,0	0,28	P1C-4LMB
50	155,0	12,0	25,0	80,0	65,0	90,0	45,0	9,0	0,53	P1C-4MMB
63	170,0	12,0	25,0	80,0	75,0	100,0	50,0	9,0	0,71	P1C-4NMB
80	190,0	16,0	30,0	80,0	95,0	126,0	63,0	12,0	1,59	P1C-4PMB
100	205,0	16,0	35,0	80,0	115,0	150,0	75,0	14,0	2,19	P1C-4QMB
125	245,0	20,0	45,0	80,0	140,0	180,0	90,0	16,0	3,78	P1C-4RMB
160	180,0	20,0	60,0	80,0	180,0	230,0	115,0	18,0	7,20	PD23410
200	300,0	25,0	70,0	80,0	220,0	270,0	135,0	22,0	12,20	PD24924
250	330,0	25,0	80,0	80,0	280,0	330,0	165,0	26,0	19,20	PD25761
320	370,0	30,0	90,0	80,0	340,0	400,0	200,0	33,0	38,00	KL9140

Dimensions for cylinders without piston rod protusion or with rod lock unit

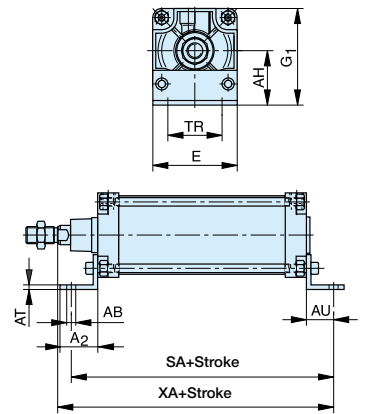
Foot brackets MS1



Intended for fixed mounting of cylinder. Foot bracket can be fitted to front and rear end covers of cylinder.

Materials
Foot bracket: Passivated steel
Mounting screws acc. to DIN 912: Zinc-plated steel 8.8

Supplied in pairs with mounting screws for attachment to cylinder.



Bore mm	E mm	TR mm	AH mm	G1 mm	AT mm	A2 mm	ØAB mm	SA mm	XA mm	AU mm	Weight kg	Order code
32	45,0	32,0	32,0	56,0	4,5	34,0	7,0	142,0	144,0	24,0	0,06	P1C-4KMF
40	52,0	36,0	36,0	62,8	4,5	36,0	9,0	161,0	163,0	28,0	0,08	P1C-4LMF
50	65,0	45,0	45,0	77,6	5,5	45,0	9,0	170,0	175,0	32,0	0,16	P1C-4MMF
63	75,0	50,0	50,0	87,8	5,5	45,0	9,0	185,0	190,0	32,0	0,25	P1C-4NMF
80	95,0	63,0	63,0	110,5	6,5	55,0	12,0	210,0	215,0	41,0	0,50	P1C-4PMF
100	115,0	75,0	71,0	128,0	6,5	56,0	14,0	220,0	230,0	41,0	0,85	P1C-4QMF
125	140,0	90,0	90,0	159,5	8,0	67,0	16,0	250,0	270,0	45,0	1,48	P1C-4RMF
160	180,0	115,0	115,0	205,0	8,0	80,0	18,0	300,0	320,0	60,0	3,80	PD70512
200	220,0	135,0	135,0	245,0	9,0	100,0	22,0	320,0	345,0	70,0	5,00	PD24792
250	280,0	165,0	165,0	305,0	10,0	110,0	26,0	350,0	380,0	75,0	9,70	PD25758
320	340,0	200,0	200,0	370,0	23,0	125,0	33,0	390,0	470,0	85,0	17,00	KL9139

Weight per item

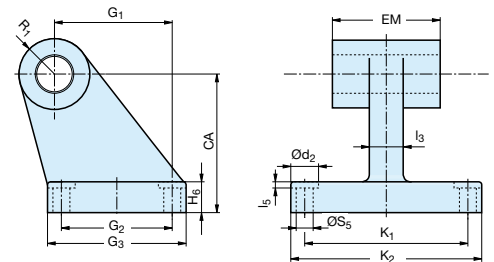
Dimensions for cylinders without piston rod protusion or with rod lock unit

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: Ø 160-200: cast aluminium
Ø 250-320: cast steel



Bore mm	R1 mm	ØCX H7 mm	G1 mm	CA mm	H6 mm	G2 mm	G3 mm	EM mm	l3 mm	Ød2 mm	l5 mm	ØS5 mm	K1 mm	K2 mm	Weight kg	Order code Not anodised	Order code Black anodised
32	10,0	10,0	21,0	32,0	8,0	18,0	31,0	25,5	10,0	-	-	6,6	38,0	51,0	0,06	P1C-4KMDB	P1C-4KMD
40	11,0	12,0	24,0	36,0	10,0	22,0	35,0	27,0	15,0	-	-	6,6	41,0	54,0	0,08	P1C-4LMDB	P1C-4LMD
50	13,0	12,0	33,0	45,0	12,0	30,0	45,0	31,0	16,0	-	-	9,0	50,0	65,0	0,15	P1C-4MMDB	P1C-4MMD
63	15,0	16,0	37,0	50,0	12,0	35,0	50,0	39,0	16,0	-	-	9,0	52,0	67,0	0,20	P1C-4NMDB	P1C-4NMD
80	15,0	16,0	47,0	63,0	14,0	40,0	60,0	49,0	20,0	-	-	11,0	66,0	86,0	0,33	P1C-4PMDB	P1C-4PMD
100	19,0	20,0	55,0	71,0	15,0	50,0	70,0	59,0	20,0	-	-	11,0	76,0	96,0	0,49	P1C-4QMDB	P1C-4QMD
125	22,5	25,0	70,0	90,0	20,0	60,0	90,0	69,0	30,0	-	-	14,0	94,0	124,0	1,02	P1C-4RMDB	P1C-4RMD
160	31,5	30,0	97,0	115,0	25,0	88,0	126,0	90,0	36,0	20,0	4,0	14,0	118,0	156,0	6,50	P1C-4SMDB	-
200	31,5	30,0	105,0	135,0	30,0	90,0	130,0	90,0	40,0	26,0	4,0	18,0	122,0	162,0	8,00	P1C-4TMDB	-
250	40,0	40,0	128,0	165,0	35,0	110,0	160,0	110,0	45,0	33,0	4,5	22,0	150,0	200,0	13,50	P1C-4UMDB	-
320	45,0	45,0	150,0	200,0	40,0	122,0	186,0	120,0	55,0	-	-	26,0	170,0	234,0	21,90	P1C-4VMDC	-

Cylinder mountings

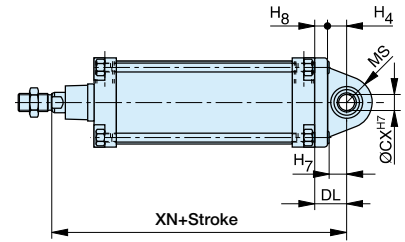
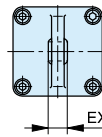
Swivel eye bracket MP6

Intended for use together with clevis bracket GA



Material
Bracket: Cast aluminium
Swivel bearing acc. to DIN 648K: Hardened steel

Supplied complete with mounting screws for attachment to cylinder.



Bore mm	EX mm	XN mm	H8 mm	H4 mm	MS mm	ØCX H7 mm	Weight kg	Order code Not anodised	Order code Black anodised
32	14,0	142,0	10,0	12,0	16,0	10,0	0,10	PD23843	P1C-4KMSA
40	16,0	160,0	10,0	15,0	21,0	12,0	0,11	PD23844	P1C-4LMSA
50	16,0	170,0	11,0	16,0	23,0	12,0	0,20	PD23845	P1C-4MMSA
63	21,0	190,0	11,0	21,0	27,0	16,0	0,27	PD23846	P1C-4NMSA
80	21,0	210,0	15,0	21,0	29,0	16,0	0,52	PD23847	P1C-4PMSA
100	25,0	230,0	16,0	25,0	34,0	20,0	0,72	PD23848	P1C-4QMSA
125	31,0	275,0	20,0	30,0	40,0	25,0	1,53	PD23849	P1C-4RMSA
160	37,0	315,0	20,0	35,0	48,0	30,0	2,60	PD23850	-
200	43,0	335,0	24,0	36,0	47,0	30,0	11,30	PD25766	-
250	49,0	375,0	28,0	42,0	53,0	40,0	19,00	PD25760	-
320	60,0	420,0	30,0	50,0	63,0	45,0	30,30	KL9136	-

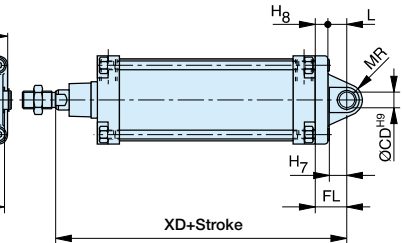
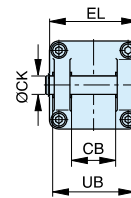
Dimensions for cylinders without piston rod protusion or with rod lock unit

Clevis bracket MP2

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



Materials
Clevis bracket: Cast aluminium
Pin: Hardened 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



Bore mm	EL mm	XD mm	ØCD H9 mm	CB H14 mm	UB mm	H8 mm	L mm	MR mm	Weight kg	Order code Not anodised	Order code Black anodised
32	53,0	142,0	10,0	26,0	45,0	10,0	12,0	11,0	0,08	P1C-4KMTB	P1C-4KMT
40	60,0	160,0	12,0	28,0	52,0	10,0	15,0	13,0	0,11	P1C-4LMTB	P1C-4LMT
50	68,0	170,0	12,0	32,0	60,0	11,0	16,0	18,0	0,14	P1C-4MMTB	P1C-4MMT
63	78,0	190,0	16,0	40,0	70,0	11,0	21,0	18,0	0,29	P1C-4NMTB	P1C-4NMT
80	98,0	210,0	16,0	50,0	90,0	15,0	21,0	22,0	0,36	P1C-4PMTB	P1C-4PMT
100	118,0	230,0	20,0	60,0	110,0	16,0	25,0	22,0	0,64	P1C-4QMTB	P1C-4QMT
125	139,0	275,0	25,0	70,0	130,0	20,0	30,0	30,0	1,17	P1C-4RMTB	P1C-4RMT
160	172,0	315,0	30,0	90,0	170,0	20,0	35,0	30,0	2,60	P1C-4SMTB	-
200	172,0	335,0	30,0	90,0	170,0	25,0	35,0	31,0	4,10	P1C-4TMTB	-
250	280,0	375,0	40,0	110,0	200,0	25,0	45,0	41,0	7,10	P1C-4UMTB	-
320	340,0	420,0	45,0	120,0	220,0	30,0	50,0	54,0	31,0	P1C-4VMTB	-

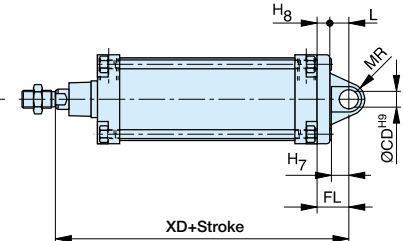
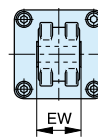
Dimensions for cylinders without piston rod protusion or with rod lock unit

Clevis bracket MP4

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



Materials
Clevis bracket: Cast aluminium
Mounting screws acc. to DIN 912: Zinc-plated steel 8.8
Supplied complete with mounting screws for attachment to cylinder.



Bore mm	EW mm	XD mm	H8 mm	L mm	MR mm	ØCD mm	Weight kg	Order code Not anodised	Order code Black anodised
32	26,0	142,0	10,0	12,0	11,0	10,0	0,09	PD23412	PD23412
40	28,0	160,0	10,0	15,0	13,0	12,0	0,13	PD23413	PD23413
50	32,0	170,0	11,0	16,0	18,0	12,0	0,17	PD23414	PD23414
63	40,0	190,0	11,0	21,0	18,0	16,0	0,36	PD23415	PD23415
80	50,0	210,0	15,0	21,0	22,0	16,0	0,58	PD23416	PD23416
100	60,0	230,0	16,0	25,0	22,0	20,0	0,89	PD23417	PD23417
125	70,0	275,0	20,0	30,0	30,0	25,0	1,75	PD23418	PD23418
160	90,0	315,0	20,0	35,0	30,0	30,0	2,70	PD22628	PD22628
200	90,0	335,0	25,0	35,0	31,0	30,0	4,20	PD24999	PD24999
250	110,0	375,0	25,0	45,0	41,0	40,0	15,70	PD25759	PD25759
320	120,0	420,0	30,0	50,0	46,0	45,0	33,00	KL9135	KL9135

Dimensions for cylinders without piston rod protusion or with rod lock unit

Cylinder mountings

Pivot brackets AT4 for MT* mounting trunnion

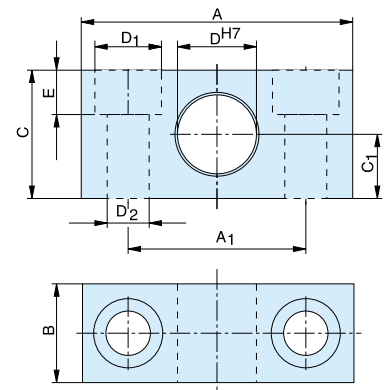


Intended for use together with intermediate trunnion MT4 or MT5 / MT6.

Material:
 Pivot bracket:
 Ø32-125 mm – Aluminium
 Ø160-250 mm – Anodised aluminium
 Ø 320 mm – steel

Bearing acc. to DIN 1850 C

Supplied in pairs.



Bore mm	A mm	A1 mm	B mm	C mm	C1 mm	ØD H7 mm	ØD1 mm	ØD2 mm	E mm	Weight kg	Order code Not anodised
32	55	36	20	26	13	12	13,5	8,4	9,0	0,06	PD23381
40	55	36	20	26	13	16	13,5	8,4	9,0	0,06	PD23382
50	55	36	20	26	13	16	13,5	8,4	9,0	0,06	PD23382
63	65	42	25	30	15	20	16,5	10,5	11,0	0,10	PD23383
80	65	42	25	30	15	20	16,5	10,5	11,0	0,10	PD23383
100	75	50	28	40	20	25	19,0	13,0	13,0	0,18	PD23384
125	75	50	28	40	20	25	19,0	13,0	13,0	0,18	PD23384
160	92	60	35	60	30	32	26,0	18,0	17,0	0,35	PD24425
200	92	60	35	60	30	32	26,0	18,0	17,0	0,35	PD24425
250	140	90	40	70	35	40	33,0	22,0	21,5	0,50	PD25763
320	150	100	60	80	40	50	40,0	26,0	25,5	6,70	KL9130

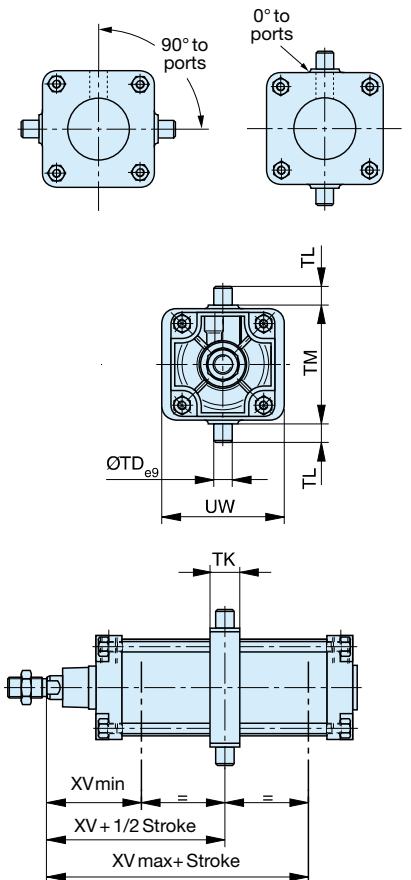
Intermediate trunnion MT4



The trunnion is MT4 for P1D-T factory-fitted in the centre of the cylinder or at an optional location specified by the XV-measure - Combined with pivot brackets AT4.

Material:
 Trunnion: Zinc plated steel
 Trunnion centred
 The central trunnion for the P1D-T is ordered with letter D in position 17 (no dimension specified in positions 18-20). e.g. P1D-T160MS-0500NDNNN
 Trunnion with optional location

The trunnion for the P1D-T is ordered with letter G in position 17 and desired XV-measure (3-digit measure in mm) in positions 18-20. e.g. P1D-T160MS-0500NG300



Bore mm	TK mm	TL h14 mm	TM h14 mm	ØTD e9 mm	XV min mm	XV mm	XV max mm	Weight kg
32	15	12	50	12	62,0	73,0	84,0	0,13
40	20	16	63	16	73,0	82,5	92,0	0,31
50	20	16	75	16	80,5	90,0	99,5	0,37
63	25	20	90	20	89,0	97,5	106,0	0,69
80	25	20	110	20	98,0	110,0	122,0	0,89
100	30	25	132	25	110,5	120,0	129,5	1,58
125	32	25	180	25	132,0	145,0	158,0	2,60
160	45	32	200	32	150,0	170,0	190,0	6,10
200	50	32	250	32	165,0	185,0	205,0	8,10
250	55	40	320	40	195,0	205,0	210,0	14,8
320	65	50	400	50	210,0	230,0	250,0	16,0

Important: If the cylinder is ordered with a piston rod protusion (WH dimension), please add this extra length to XVmin, XV and XVmax.

Piston rod mountings

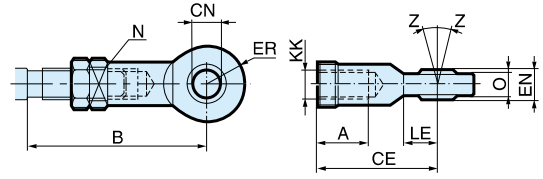
Swivel rod eye AP6



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

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

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



According to ISO 8139

Bore mm	A mm	B min mm	B max mm	CE mm	ØCN H9 mm	h12 mm	ER mm	KK mm	LE min mm	N mm	O mm	Z mm	Weight kg	Order code	Order code Stainless steel
32	20	48,0	55	43	10	14	14	M10x1,25	15	17	10,5	12°	0,08	P1C-4KRS	P1S-4JRT
40	22	56,0	62	50	12	16	16	M12x1,25	17	19	12,0	12°	0,12	P1C-4LRS	P1S-4LRT
50	28	72,0	80	64	16	21	21	M16x1,5	22	22	15,0	15°	0,25	P1C-4MRS	P1S-4MRT
63	28	72,0	80	64	16	21	21	M16x1,5	22	22	15,0	15°	0,25	P1C-4MRS	P1S-4MRT
80	33	87,0	97	77	20	25	25	M20x1,5	26	32	18,0	15°	0,46	P1C-4PRS	P1S-4PRT
100	33	87,0	97	77	20	25	25	M20x1,5	26	32	18,0	15°	0,46	P1C-4PRS	P1S-4PRT
125	51	123,5	137	110	30	37	35	M27x2	36	41	25,0	15°	1,28	P1C-4RRS	P1S-4RRT
160	56			125	35	43	40	M36x2	41	50	28,0		1,60	KY6863	-
200	56			125	35	43	40	M36x2	41	50	28,0		1,60	KY6863	-
250	60			142	40	49	45	M42x2	46	55	33,0		3,50	KY6864	-
320	65			160	50	60	58	M48x2	59	65	45,0		5,20	KY9132	-

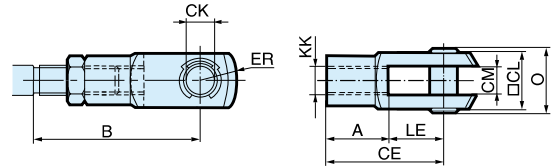
Clevis AP2



Clevis for articulated mounting of cylinder.

Material:
Clevis, clip: Galvanized steel
Pin: Hardened steel

Clevis, clip: Stainless steel
Pin: Stainless steel



According to ISO 8140

Bore mm	A mm	B min mm	B max mm	CE mm	CK h11/e9 mm	CL mm	CM mm	ER mm	KK mm	LE mm	O mm	Weight kg	Order code	Order code Stainless steel
32	20	45,0	52	40	10	20	10	16	M10x1,25	20	28,0	0,09	P1C-4KRC	P1S-4JRD
40	24	54,0	60	48	12	24	12	19	M12x1,25	24	32,0	0,15	P1C-4LRC	P1S-4LRD
50	32	72,0	80	64	16	32	16	25	M16x1,5	32	41,5	0,35	P1C-4MRC	P1S-4MRD
63	32	72,0	80	64	16	32	16	25	M16x1,5	32	41,5	0,35	P1C-4MRC	P1S-4MRD
80	40	90,0	100	80	20	40	20	32	M20x1,5	40	50,0	0,75	P1C-4PRC	P1S-4PRD
100	40	90,0	100	80	20	40	20	32	M20x1,5	40	50,0	0,75	P1C-4PRC	P1S-4PRD
125	56	123,5	137	110	30	55	30	45	M27x2	54	72,0	2,10	P1C-4RRC	P1S-4RRD
160	72			144	35	70	36		M36x2	72		2,90	KY6867	-
200	72			144	35	70	36		M36x2	72		2,90	KY6867	-
250	84			168	40	85	40		M42x2	84		6,00	KY6868	-
320	96			192	50	90	50		M48x2	96		7,90	KY9131	-

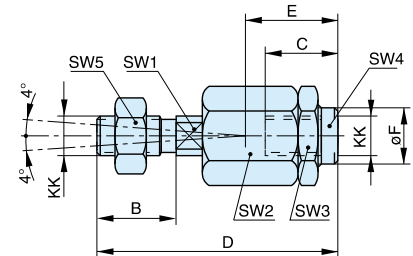
Flexo coupling PM5



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.



Bore mm	KK mm	B mm	C mm	D mm	E mm	ØF mm	SW1 mm	SW2 mm	SW3 mm	SW4 mm	SW5 mm	Weight kg	Order code
32	M10x1,25	20	23	73	31	21,0	12	30	30	19	17	0,21	P1C-4KRF
40	M12x1,25	24	23	77	31	21,0	12	30	30	19	19	0,22	P1C-4LRF
50	M16x1,5	32	32	108	45	33,5	19	41	41	30	24	0,67	P1C-4MRF
63	M16x1,5	32	32	108	45	33,5	19	41	41	30	24	0,67	P1C-4MRF
80	M20x1,5	40	42	122	56	33,5	19	41	41	30	30	0,72	P1C-4PRF
100	M20x1,5	40	42	122	56	33,5	19	41	41	30	30	0,72	P1C-4PRF
125	M27x2	54	48	147	51	39,0	24	55	55	32	41	1,80	P1C-4RRF
160	M36x2	72	50	241	110	56,0	36	75	75	50	55	5,10	KY1139
200	M36x2	72	50	241	110	56,0	36	75	75	50	55	5,10	KY1139
250	M42x2	82	88	271	120	-	36	80	80	60	65	7,90	KY1140
320	M48x2	82	88	271	120	-	42	80	80	60	75	7,90	KY9133

	Flange MF1/MF2 ¹	Foot brackets MS1 ²	Pivot bracket with rigid bearing AB7 ³	Swivel eye bracket MP6 ⁴	Clevis bracket MP2 ⁵
Ø 32	P1C-4KMB	P1C-4KMF	P1C-4KMDB	PD23843	P1C-4KMTB
Ø 40	P1C-4LMB	P1C-4LMF	P1C-4LMDB	PD23844	P1C-4LMTB
Ø 50	P1C-4MMB	P1C-4MMF	P1C-4MMDB	PD23845	P1C-4MMTB
Ø 63	P1C-4NMB	P1C-4NMF	P1C-4NMDB	PD23846	P1C-4NMTB
Ø 80	P1C-4PMB	P1C-4PMF	P1C-4PMDB	PD23847	P1C-4PMTB
Ø 100	P1C-4QMB	P1C-4QMF	P1C-4QMDB	PD23848	P1C-4QMTB
Ø 125	P1C-4RMB	P1C-4RMF	P1C-4RMDB	PD23849	P1C-4RMTB
Ø 160	PD23410	PD70512	P1C-4SMDB	PD23850	P1C-4SMTB
Ø 200	PD24924	PD24792	P1C-4TMDB	PD25766	P1C-4TMTB
Ø 250	PD25761	PD25758	P1C-4UMDC	PD25760	P1C-4UMTB
Ø 320	KL9140	KL9139	P1C-4VMDC	KL9136	P1C-4VMTB
	Clevis bracket MP4 ⁶	Clevis bracket AB6 ⁷	Pivot bracket with swivel bearing CS7 ⁸	3 and 4 positions flange JP1	Pivot brackets AT4 ¹⁰ for MT* trunnion
Ø 32	PD23412	P1C-4KMCB	KC5130	P1E-6KB0	PD23381
Ø 40	PD23413	P1C-4LMCB	KC5131	P1E-6LB0	PD23382
Ø 50	PD23414	P1C-4MMCB	KC5132	P1E-6MB0	PD23382
Ø 63	PD23415	P1C-4NMCB	KC5133	P1E-6NB0	PD23383
Ø 80	PD23416	P1C-4PMCB	KC5134	P1E-6PB0	PD23383
Ø 100	PD23417	P1C-4QMCB	KC5135	P1E-6QB0	PD23384
Ø 125	PD23418	P1C-4RMCB	KC5136		PD23384
Ø 160	PD22628				PD24425
Ø 200	PD24999				PD24425
Ø 250	PD25759				PD25763
Ø 320	KL9135				KL9130
	Flange trunnion MT5/MT6 ¹¹	Swivel rod eye AP6 ¹²	Clevis AP2 ¹³	Flexo coupling PM5 ¹⁴	Zinc-plated nut MR9 ¹⁵
Ø 32	P1D-4KMYF	P1C-4KRS	P1C-4KRC	P1C-4KRF	P14-4KRPZ
Ø 40	P1D-4LMYF	P1C-4LRS	P1C-4LRC	P1C-4LRF	P14-4LRPZ
Ø 50	P1D-4MMYF	P1C-4MRS	P1C-4MRC	P1C-4MRF	P14-4MRPZ
Ø 63	P1D-4NMYF	P1C-4MRS	P1C-4MRC	P1C-4MRF	P14-4MRPZ
Ø 80	P1D-4PMYF	P1C-4PRS	P1C-4PRC	P1C-4PRF	P14-4PRPZ
Ø 100	P1D-4QMYF	P1C-4PRS	P1C-4PRC	P1C-4PRF	P14-4PRPZ
Ø 125		P1C-4RRS	P1C-4RRC	P1C-4RRF	P14-4RRPZ
Ø 160		KY6863	KY6867	KY1139	
Ø 200		KY6863	KY6867	KY1139	
Ø 250		KY6864	KY6868	KY1140	
Ø 320		KL9132	KL9131	KL9133	

