

Flange MF1/MF2

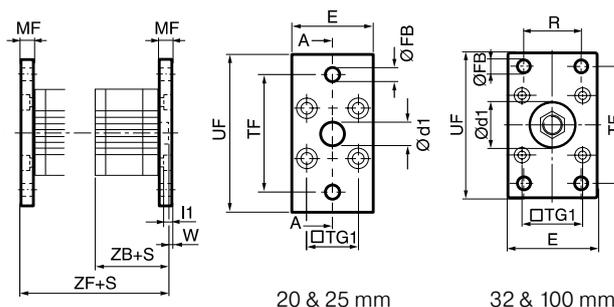
Intended for fixed mounting of cylinder. Flange can be fitted to front or rear end cover of cylinder.

Materials

Flange: Surface-treated steel

Mounting screws acc. to DIN 6912:

Zinc-plated steel 8.8. Supplied complete with mounting screws for attachment to the cylinder.



According to ISO 15552

Cyl. -bore [mm]	D _(H11) [mm]	E [mm]	ØFB _(H13) [mm]	L4 [mm]	MF [mm]	R [mm]	TF [mm]	TG [mm]	UF [mm]	W ¹⁾ [mm]	ZB ¹⁾ [mm]	ZF ¹⁾ [mm]	Weight [kg]	Order code
Ø20	12	36	6.6	4.6	10	-	55	22	70	43	53	53	0.17	P1P-4HMB
Ø25	12	40	6.6	4.6	10	-	60	26	76	45	55	55	0.20	P1P-4JMB
Ø32	30	45	7	5.0	10	32	64	32.5	80	16	123.5	130	0.21	P1C-4KMB
Ø40	35	52	9	5.0	10	36	72	38.0	90	20	138.5	145	0.27	P1C-4LMB
Ø50	40	65	9	6.5	12	45	90	46.5	110	25	146.5	155	0.53	P1C-4MMB
Ø63	45	75	9	6.5	12	50	100	56.5	120	25	161.5	170	0.66	P1C-4NMB
Ø80	45	95	12	9.0	16	63	126	72.0	150	30	177.5	190	1.45	P1C-4PMB
Ø100	55	115	14	9.0	16	75	150	89.0	170	35	192.5	205	1.60	P1C-4QMB

S = Stroke length

¹⁾ Does not apply to cylinders with piston rod extension

Foot Bracket MS1

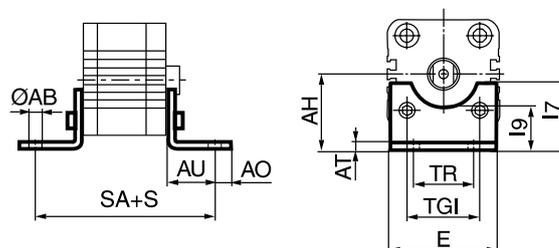
Intended for fixed mounting of cylinder. Foot bracket can be fitted to front or rear end cover of the cylinder.

Materials

Flange: Surface-treated steel

Mounting screws acc. to DIN 6912:

Zinc-plated steel 8.8: Supplied complete with mounting screws for attachment to the cylinder.



According to ISO 15552

Cyl. -bore [mm]	ØAB _(H14) [mm]	AH _(JS15) [mm]	AO [mm]	AT [mm]	AU [mm]	E [mm]	L7 [mm]	SA ²⁾ [mm]	TG _(JS14) [mm]	TR [mm]	Weight ³⁾ [kg]	Order code
Ø20	6.6	27	6.0	4.0	16.0	36	22	69	22	26	0.04	P1P-4HMF
Ø25	6.6	30	6.0	4.0	16.0	40	23	71	26	26	0.05	P1P-4JMF
Ø32	7	32	10.0	4.0	24	45	30	92	32.5	32	0.06	P1C-4KMF
Ø40	10	36	8.0	4.0	28	52	30	101	38.0	36	0.08	P1C-4LMF
Ø50	10	45	13.0	5.0	32	65	36	109	46.5	45	0.16	P1C-4MMF
Ø63	10	50	13.0	5.0	32	75	35	113	56.5	50	0.25	P1C-4NMF
Ø80	12	63	14.0	6.0	41	95	49	136	72.0	63	0.50	P1C-4PMF
Ø100	14.5	71	15.0	6.0	41	115	54	149	89.0	75	0.85	P1C-4QMF

²⁾ Does not apply to cylinders with piston rod extension

³⁾ per bracket

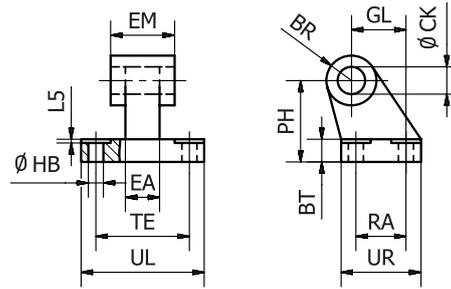
Pivot Bracket with Rigid Bearing AB7

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

Materials

Pivot bracket: Aluminium
(no surface treatment)

Bush: Steel and PTFE



According to ISO 15552															
Cyl.-bore [mm]	CK [mm]	HB [mm]	L5 [mm]	TE [mm]	UL [mm]	GL [mm]	RA [mm]	EA [mm]	EM [mm]	UR [mm]	PH [mm]	BT [mm]	BR [mm]	Weight [kg]	Order code
Ø32	10	6.6	1.6	38	51	21	18	10	26	31	32	8	10.0	0.05	P1C-4KMDB
Ø40	12	6.6	1.6	41	54	24	22	15	28	35	36	10	11.0	0.09	P1C-4LMDB
Ø50	12	9.0	1.6	50	65	33	30	16	32	45	45	12	13.0	0.16	P1C-4MMDB
Ø63	16	9.0	1.6	52	67	37	35	16	40	50	50	14	15.0	0.20	P1C-4NMDB
Ø80	16	11.0	2.5	66	86	47	40	20	50	60	63	14	15.0	0.32	P1C-4PMDB
Ø100	20	11.0	2.5	76	96	55	50	20	60	70	71	17	19.0	0.53	P1C-4QMDB

Swivel Eye Bracket MP6

Intended for use together with clevis bracket AB6.

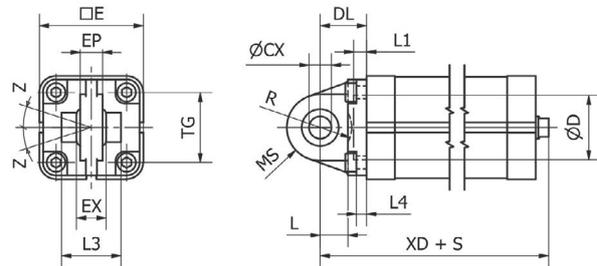
Materials

Bracket: Aluminium
(no surface treatment)

Swivel bearing acc. to DIN 648K:

Hardened steel

Supplied complete with mounting screws for attachment to cylinder.



According to ISO 15552																	
Cyl.-bore [mm]	CX [mm]	D [mm]	DL [mm]	E [mm]	EP [mm]	EX [mm]	L [mm]	L1 [mm]	L3 [mm]	L4 [mm]	MS [mm]	R [mm]	TG [mm]	XD ¹⁾ [mm]	Z	Weight [kg]	Order code
Ø32	10	30	22	45	10.5	14	12	7	-	5.5	16	-	32.5	73	4°	0.09	P1C-4KMSB
Ø40	12	35	25	52	12	16	15	7	-	5.5	18	-	38	77	4°	0.13	P1C-4LMSB
Ø50	16	40	27	65	15	21	15	7	51	6.5	21	19	46.5	80	4°	0.24	P1C-4MMSB
Ø63	16	45	32	75	15	21	20	7	-	6.5	23	-	56.5	89	4°	0.29	P1C-4NMSB
Ø80	20	45	36	95	18	25	20	9	74	10	28	24	72	100	4°	0.59	P1C-4PMSB
Ø100	20	55	41	115	18	25	25	9	140	10	30	32	89	118	4°	0.78	P1C-4QMSB

¹⁾ Does not apply to cylinders with piston rod extension

Clevis Bracket MP2

Intended for flexible mounting of cylinder. Can be combined with clevis bracket MP4 and pivot bracket with rigid bearing AB7.

Materials

Clevis bracket: Aluminium (no surface treatment)

Pin: Surface hardened steel

Locking pin: Spring steel

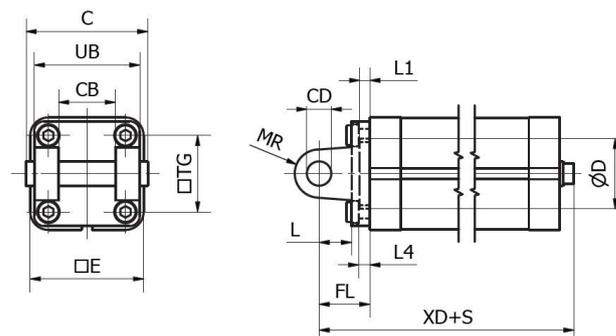
Circlips according to DIN 471:

Spring steel

Mounting screws acc. to DIN 912,

zinc-plated steel 8.8

Supplied complete with mounting screws for attachment to the cylinder.



According to ISO 15552																
Cyl. -bore [mm]	C [mm]	E [mm]	UB [mm]	CB [mm]	TG [mm]	FL [mm]	L1 [mm]	L [mm]	L4 [mm]	D [mm]	CD [mm]	MR [mm]	XD ¹⁾ [mm]	Weight [kg]	Order code	
Ø32	53	45	45	26	32.5	22	5	13	5.5	30	10	10	73	0.08	P1C-4KMTB	
Ø40	60	52	52	28	38	25	5	16	5.5	35	12	12	77	0.10	P1C-4LMTB	
Ø50	68	65	60	32	46.5	27	5	16	6.5	40	12	12	80	0.18	P1C-4MMTB	
Ø63	78	75	70	40	56.5	32	5	21	6.5	45	16	16	89	0.24	P1C-4NMTB	
Ø80	98	95	90	50	72	36	5	22	10	45	16	16	100	0.49	P1C-4PMTB	
Ø100	118	115	110	60	89	41	5	27	10	55	20	20	118	0.73	P1C-4QMTB	

S = Stroke length

¹⁾ Does not apply to cylinders with piston rod extension

Clevis Bracket MP4

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

Materials

Clevis Bracket: Aluminium

20-25mm, surface treated, black

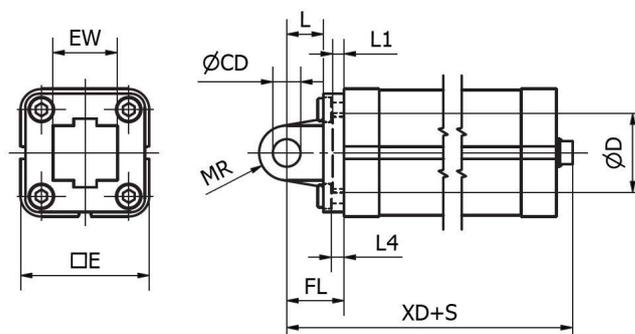
32-100mm, no surface treatment

Bush: Steel and PTFE

Mounting screws: acc. DIN 912,

zinc plated steel 8.8

Supplied complete with mounting screws for attachment to the cylinder.



According to ISO 15552													
Cyl. -bore [mm]	CD [mm]	D [mm]	E [mm]	EW [mm]	FL [mm]	L [mm]	L1 [mm]	L4 [mm]	MR [mm]	XD*	Weight [kg]	Order code	
Ø20	8	12	34	16	20	14	4.5			63	0.04	P1P-4HME	
Ø25	8	12	38	16	20	14	4.5	3	8	65	0.04	P1P-4JME	
Ø32	10	30	47	26	22	12	6.5	6	10.5	73	0.08	P1C-4KMEB	
Ø40	12	35	52	28	25	16	5	5.5	12	77	0.11	P1C-4LMEB	
Ø50	12	40	65	32	27	16	5	6.5	12	80	0.18	P1C-4MMEB	
Ø63	16	45	78	40	32	21	5	6.5	16	89	0.28	P1C-4NMEB	
Ø80	16	45	95	50	36	22	5	10	16	100	0.52	P1C-4PMEB	
Ø100	20	55	115	60	41	27	5	10	20	118	0.79	P1C-4QMEB	

Clevis Bracket - AB6

Intended for flexible mounting of cylinder. Clevis bracket AB6 can be combined with pivot brackets MP6 and CS7 or swivel rod eye AP6.

Materials

Clevis bracket: Aluminium (no surface treatment)

Pin: Surface hardened steel

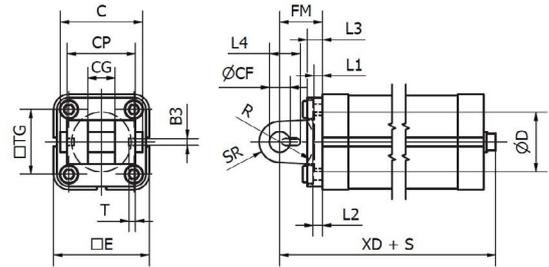
Locking pin: Spring steel

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 the cylinder.



According to ISO 15552

Cyl.-bore [mm]	B3 [mm]	C [mm]	CF [mm]	CG [mm]	CP [mm]	D [mm]	E [mm]	FM [mm]	I2 [mm]	T [mm]	R [mm]	L1 [mm]	L4 [mm]	L3 [mm]	SR [mm]	TG [mm]	XD ¹⁾ [mm]	Weight [kg]	Order code
Ø32	3.3	41	10	14	34	30	45	22	5.5	3	17	5	16.5	9	10	32.5	73	0.04	P1C-4KMCB
Ø40	4.3	48	12	16	40	35	52	25	5.5	4	20	5	18	9	12	38	77	0.07	P1C-4LMCB
Ø50	4.3	54	16	21	45	40	65	27	6.5	4	22	5	22	11	14	46.5	80	0.11	P1C-4MMCB
Ø63	4.3	60	16	21	51	45	75	32	6.5	4	25	5	22	11	18	56.5	89	0.19	P1C-4NMCB
Ø80	4.3	75	20	25	65	45	95	36	10.0	4	30	5	26	14	20	72	100	0.38	P1C-4PMCB
Ø100	6.3	85	20	25	75	55	115	41	10.0	4	32	5	26	14	22	89	118	0.61	P1C-4QMCB

S = Stroke length

¹⁾ Does not apply to cylinders with piston rod extension

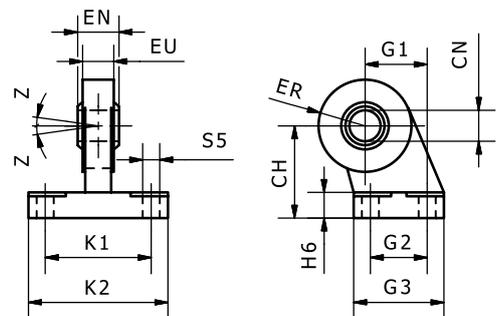
Pivot Bracket with Swivel Bearing - CS7

Intended for use together with clevis bracket AB6.

Materials

Pivot bracket: Steel (zinc plated)

Swivel bearing acc. to DIN 648K: Hardened steel



According to ISO 15552

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	Weight [kg]	Order code
Ø32	10	6.6	38	51	10.5	21	18	14	31	32	10	15	4°	0.18	P1C-4KMAF
Ø40	12	6.6	41	54	12.0	24	22	16	35	36	10	18	4°	0.27	P1C-4LMAF
Ø50	16	9.0	50	65	15.0	33	30	21	45	45	12	20	4°	0.46	P1C-4MMAF
Ø63	16	9.0	52	67	15.0	37	35	21	50	50	12	23	4°	0.55	P1C-4NMAF
Ø80	20	11.0	66	86	18.0	47	40	25	60	63	14	27	4°	0.97	P1C-4PMAF
Ø100	20	11.0	76	96	18.0	55	50	25	70	71	15	30	4°	1.33	P1C-4QMAF
Ø125	30	13.5	94	124	25.0	70	60	37	90	90	20	40	4°	3.00	P1C-4RMAF

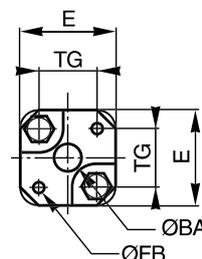
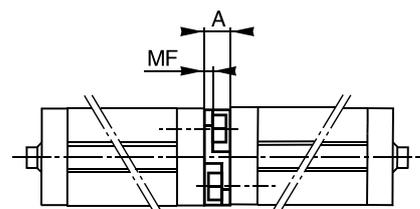
3 and 4 Position Flange - JP1

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

Materials

Mounting: Aluminium (no surface treatment)

Mounting screws: Zinc-plated steel 8.8



Cyl.-bore	A	ØBA	E	ØFB	JE	MF	TG	Weight	Order code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	
Ø32	16	30	47	6.5	50	9	32.5	0.04	P1E-6KB0
Ø40	16	35.5	53	6.5	58	9	38.0	0.07	P1E-6LB0
Ø50	20	40.5	64.5	8.5	66	6	46.5	0.08	P1E-6MB0
Ø63	20	45.5	75	8.5	80	6	56.5	0.16	P1E-6NB0
Ø80	25	45.5	94	10.5	99	8	72.0	0.30	P1E-6PB0
Ø100	25	55.5	111	10.5	118	8	89.0	0.54	P1E-6QB0

Swivel Rod Eye - AP6

Swivel rod eye for articulated mounting of the cylinder. Swivel rod eye can be combined with clevis bracket AB6.

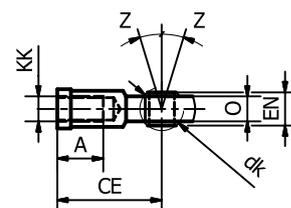
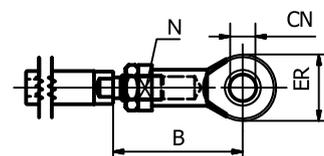
Materials

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 DIN ISO 8139														
Cyl.-bore	A	B _{min}	B _{max}	CE	CN	EN	ER	KK	N	O	Z	Weight	Order Code	
													Galvanised steel	Stainless steel
Ø20	12	40.0	45	36	8	12	12	M8x1.25	13	9.0	12°	0.045	P1A-4HRS	P1S-4HRT
Ø25	12	40.0	45	36	8	12	12	M8x1.25	13	9.0	12°	0.045	P1A-4HRS	P1S-4HRT
Ø32	15	48.0	55	43	10	14	29	M10x1.25	17	10.5	13°	0.07	P1C-4KRS	P1S-4JRT
Ø40	18	56.0	62	50	12	16	33	M12x1.25	19	12.0	13°	0.11	P1C-4LRS	P1S-4LRT
Ø50	24	72.0	80	64	16	21	43	M16x1.5	22	15.0	15°	0.21	P1C-4MRS	P1S-4MRT
Ø63	24	72.0	80	64	16	21	43	M16x1.5	22	15.0	15°	0.21	P1C-4MRS	P1S-4MRT
Ø80	30	87.0	97	77	20	25	51	M20x1.5	30	18.0	15°	0.38	P1C-4PRS	P1S-4PRT
Ø100	30	87.0	97	77	20	25	51	M20x1.5	30	18.0	15°	0.38	P1C-4PRS	P1S-4PRT

Clevis - AP2

Clevis for articulated mounting of the cylinder.

Materials

Clevis, clip: Zinc-plated steel

Pin: Hardened steel

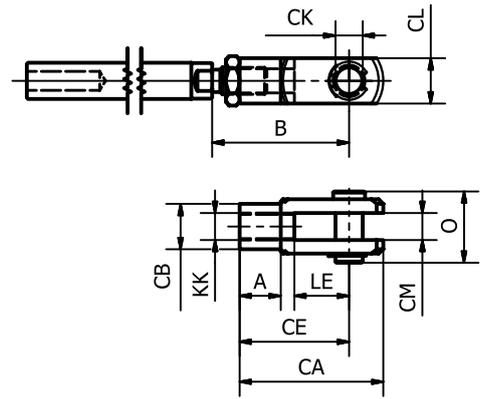
Clevis, clip: Stainless steel

Pin: Stainless steel

Galvanised Steel



Stainless Steel



According to DIN ISO 8140

Cyl.-bore [mm]	A [mm]	B _{min} [mm]	B _{max} [mm]	CA [mm]	CB [mm]	CE [mm]	CK [mm]	CL [mm]	CM [mm]	KK	LE [mm]	O [mm]	Weight [kg]	Order code	
														Galvanised steel	Stainless steel
Ø20	16	36	41	42	14	32	8	16	8	M8x1.25	16	24	0.045	P1A-4HRC	P1S-4HRD
Ø25	16	36	41	42	14	32	8	16	8	M8x1.25	16	24	0.045	P1A-4HRC	P1S-4HRD
Ø32	15	45	52	52	18	40	10	20	10	M10x1.25	20	25	0.09	P1C-4KRC	P1S-4JRD
Ø40	18	54	60	62	20	48	12	24	12	M12x1.25	24	31	0.15	P1C-4LRC	P1S-4LRD
Ø50	24	72	80	83	26	64	16	32	16	M16x1.5	32	40	0.34	P1C-4MRC	P1S-4MRD
Ø63	24	72	80	83	26	64	16	32	16	M16x1.5	32	40	0.34	P1C-4MRC	P1S-4MRD
Ø80	30	90	100	105	34	80	20	40	20	M20x1.5	40	50	0.67	P1C-4PRC	P1S-4PRD
Ø100	30	90	100	105	34	80	20	40	20	M20x1.5	40	50	0.67	P1C-4PRC	P1S-4PRD

Flexo Coupling - PM5

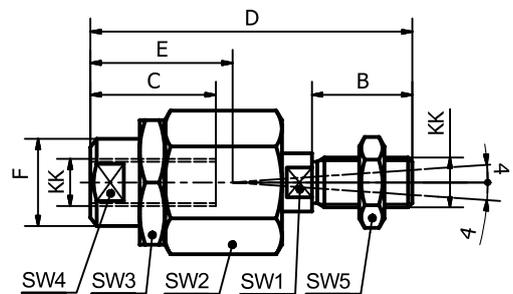
Flexo coupling for articulated mounting of piston rod.

Flexo fitting is intended to take up axial angle errors within a range of $\pm 4^\circ$.

Materials

Flexo coupling, nut: Zinc-plated steel

Supplied complete with galvanised adjustment nut.



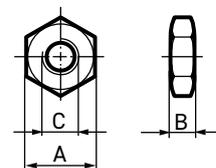
Cyl. bore [mm]	KK	B [mm]	C [mm]	D [mm]	E [mm]	ØF [mm]	SW1 [mm]	SW2 [mm]	SW3 [mm]	SW4 [mm]	SW5 [mm]	Weight [kg]	Order code
Ø20	M8x1.25	16	14	55	20	12.4	7	17	17	10	13	0.06	P1C-4HRF
Ø25	M8x1.25	16	14	55	20	12.4	7	17	17	10	13	0.06	P1C-4HRF
Ø32	M10x1.25	20	23	70	31	21	12	30	30	19	17	0.23	P1C-4KRF
Ø40	M12x1.25	24	30	77	31	21	12	30	30	19	19	0.23	P1C-4LRF
Ø50	M16x1.5	32	32	108	45	33.5	19	41	41	30	24	0.65	P1C-4MRF
Ø63	M16x1.5	32	32	108	45	33.5	19	41	41	30	24	0.65	P1C-4MRF
Ø80	M20x1.5	40	42	122	56	33.5	19	41	41	30	30	0.71	P1C-4PRF
Ø100	M20x1.5	40	42	122	56	33.5	19	41	41	30	30	0.71	P1C-4PRF

Piston Rod Nuts - MR9

Nut MR9

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

Cylinders with male piston rod thread are delivered with one piston rod nut in zinc plated steel.



Stainless steel nut MR9

Intended for fixed mounting of accessories to the piston rod. Material: Stainless steel A2

Cylinders with male piston rod thread are delivered with one piston rod nut in zinc plated steel.



Supplied as pack of 10 off.

According to DIN 439 B						
Cyl.-bore [mm]	A [mm]	B [mm]	C [mm]	Weight [kg] ¹⁾	Order code	
					Zinc plated steel	Stainless steel
Ø20	13	4.0	M8x1.25	0.005	P14-4HRPZ	P14-4HRPS
Ø25	13	4.0	M8x1.25	0.005	P14-4HRPZ	P14-4HRPS
Ø32	17	5.0	M10 x 1.25	0.007	P14-4KRPZ	P14-4KRPS
Ø40	19	6.0	M12 x 1.25	0.010	P14-4LRPZ	P14-4LRPS
Ø50	24	8.0	M16 x 1.5	0.021	P14-4MRPZ	P14-4MRPS
Ø63	24	8.0	M16 x 1.5	0.021	P14-4MRPZ	P14-4MRPS
Ø80	30	10.0	M20 x 1.5	0.040	P14-4PRPZ	P14-4PRPS
Ø100	30	10.0	M20 x 1.5	0.040	P14-4PRPZ	P14-4PRPS

¹⁾ Weight per item