



aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Accessories P1F

Ø32 to Ø125 mm

According to ISO 15552



FLUIDTECHNIK[®]
bohemia

ENGINEERING YOUR SUCCESS.

Mountings

Flange MF1 / MF2 ①



Foot brackets MS1 ②



Pivot bracket with rigid bearing AB7 ③



Swivel eye bracket MP6 ④



Clevis bracket MP2 ⑤



Ø32	P1C-4KMB	P1C-4KMF	P1C-4KMDB	P1C-4KMSB	P1C-4KMTB
Ø40	P1C-4LMB	P1C-4LMF	P1C-4LMDB	P1C-4LMSB	P1C-4LMTB
Ø50	P1C-4MMB	P1C-4MMF	P1C-4MMDB	P1C-4MMSB	P1C-4MMTB
Ø63	P1C-4NMB	P1C-4NMF	P1C-4NMDB	P1C-4NMSB	P1C-4NMTB
Ø80	P1C-4PMB	P1C-4PMF	P1C-4PMDB	P1C-4PMSB	P1C-4PMTB
Ø100	P1C-4QMB	P1C-4QMF	P1C-4QMDB	P1C-4QMSB	P1C-4QMTB
Ø125	P1C-4RMB	P1C-4RMF	P1C-4RMDB	P1C-4RMSB	P1C-4RMTB

Clevis bracket MP4 ⑥



Clevis bracket AB6 ⑦



Pivot bracket with swivel bearing CS7 ⑧



3 and 4 position flange JP1 ⑨



Pivot brackets AT4 ⑩



Ø32	P1C-4KMEB	P1C-4KMCB	P1C-4KMAF	P1E-6KB0	9301054261
Ø40	P1C-4LMEB	P1C-4LMCB	P1C-4LMAF	P1E-6LB0	9301054262
Ø50	P1C-4MMEB	P1C-4MMCB	P1C-4MMAF	P1E-6MB0	9301054262
Ø63	P1C-4NMEB	P1C-4NMCB	P1C-4NMAF	P1E-6NB0	9301054264
Ø80	P1C-4PMEB	P1C-4PMCB	P1C-4PMAF	P1E-6PB0	9301054264
Ø100	P1C-4QMEB	P1C-4QMCB	P1C-4QMAF	P1E-6QB0	9301054266
Ø125	P1C-4RMEB	P1C-4RMCB	P1C-4RMAF		9301054266

Flange trunnion MT5/MT6 ⑪



Intermediate trunnion MT4 ⑫



Swivel rod eye AP6 ⑬



Clevis AP2 ⑭



Flexo coupling PM5 ⑮



Ø32	P1D-4KMYF	Factory fitted	P1C-4KRS	P1C-4KRC	P1C-4KRF
Ø40	P1D-4LMYF	Factory fitted	P1C-4LRS	P1C-4LRC	P1C-4LRF
Ø50	P1D-4MMYF	Factory fitted	P1C-4MRS	P1C-4MRC	P1C-4MRF
Ø63	P1D-4NMYF	Factory fitted	P1C-4MRS	P1C-4MRC	P1C-4MRF
Ø80	P1D-4PMYF	Factory fitted	P1C-4PRS	P1C-4PRC	P1C-4PRF
Ø100	P1D-4QMYF	Factory fitted	P1C-4PRS	P1C-4PRC	P1C-4PRF
Ø125		Factory fitted	P1C-4RRS	P1C-4RRC	P1C-4RRF

Nut MR9 (pack of 10) ⑯

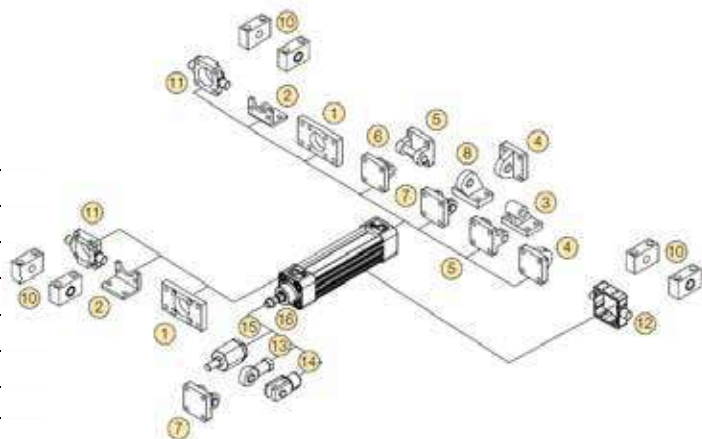
Zinc plated steel



Stainless steel



Ø32	P14-4KRPZ	P14-4KRPS
Ø40	P14-4LRPZ	P14-4LRPS
Ø50	P14-4MRPZ	P14-4MRPS
Ø63	P14-4MRPZ	P14-4MRPS
Ø80	P14-4PRPZ	P14-4PRPS
Ø100	P14-4PRPZ	P14-4PRPS
Ø125	P14-4RRPZ	P14-4RRPS



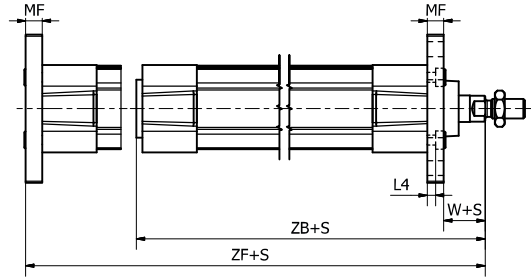
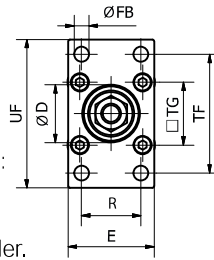
Flange - MF1 / MF2



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	D _(H11)	E	ØFB _(H13)	L4	MF	R	TF	TG	UF	W*	ZB*	ZF*	Weight	Order code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	
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
Ø125	60	140	16	10.5	20	90	180	110.0	205	45	230.5	245	3.34	P1C-4RMB

*Does not apply to cylinders with piston rod extension or lock units.

Foot Bracket - MS1

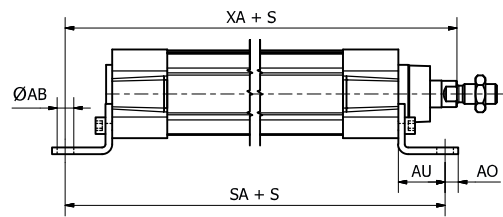
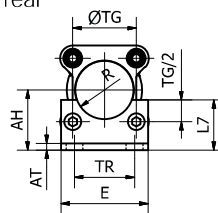


Intended for fixed mounting of cylinder.
Foot bracket can be fitted to front or rear end cover of the cylinder.

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	ØAB _(H14)	AH _(JS15)	AO	AT	AU	E	L7	R	SA*	TG	TR _(JS14)	XA*	Weight **	Order code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	
Ø32	7.0	32	11	4	24	45	30	15.0	142	32.5	32	144	0.08	P1C-4KMF
Ø40	10.0	36	8	4	28	52	30	17.5	161	38.0	36	163	0.09	P1C-4LMF
Ø50	10.0	45	15	5	32	65	36	20.0	170	46.5	45	175	0.18	P1C-4MMF
Ø63	10.0	50	13	5	32	75	35	22.5	185	56.5	50	190	0.20	P1C-4NMF
Ø80	12.0	63	14	6	41	95	47	22.5	210	72.0	63	215	0.40	P1C-4PMF
Ø100	14.5	71	16	6	41	115	53	27.5	220	89.0	75	230	0.54	P1C-4QMF
Ø125	16.5	90	25	8	45	140	70	30.0	250	110.0	90	270	1.10	P1C-4RMF

*Does not apply to cylinders with piston rod extension or lock units.

** per bracket

Pivot Bracket with Rigid Bearing - AB7

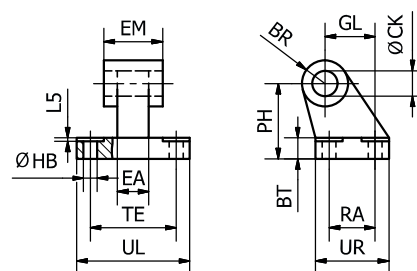


Intended for flexible mounting of cylinder. The pivot bracket can be combined with clevis bracket MP2.

Materials:

Pivot bracket: Aluminium

Bush: Steel and PTFE



According to ISO 15552

Cyl.-bore	CK	HB	L5	TE	UL	GL	RA	EA	EM	UR	PH	BT	BR	Weight	Order code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	
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
Ø125	25	14.0	3.2	94	124	70	60	30	70	90	90	20	22.5	1.01	P1C-4RMDB

Swivel Eye Bracket - MP6



Intended for use together with clevis bracket AB6.

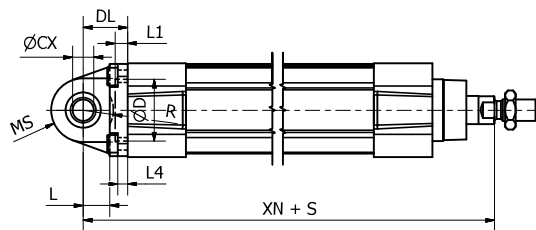
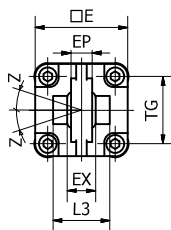
Materials:

Bracket: Aluminium

Swivel bearing acc. to DIN 648K:

Hardened steel

Supplied complete with mounting screws for attachment to cylinder.



According to ISO 15552

Cyl.-bore	CX	D	DL	E	EP	EX	L	L1	L3	L4	MS	R	TG	XN	Z	Weight	Order code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[kg]	
Ø32	10	30	22	45	10.5	14	12	7	-	5.5	16	-	32.5	142	4°	0.09	P1C-4KMSB
Ø40	12	35	25	52	12	16	15	7	-	5.5	18	-	38	160	4°	0.13	P1C-4LMSB
Ø50	16	40	27	65	15	21	15	7	51	6.5	21	19	46.5	170	4°	0.24	P1C-4MMSB
Ø63	16	45	32	75	15	21	20	7	-	6.5	23	-	56.5	190	4°	0.29	P1C-4NMSB
Ø80	20	45	36	95	18	25	20	9	74	10	28	24	72	210	4°	0.59	P1C-4PMSB
Ø100	20	55	41	115	18	25	25	9	140	10	30	32	89	230	4°	0.78	P1C-4QMSB
Ø125	30	60	50	140	25	37	30	9	-	10	40	-	110	275	4°	1.38	P1C-4RMSB

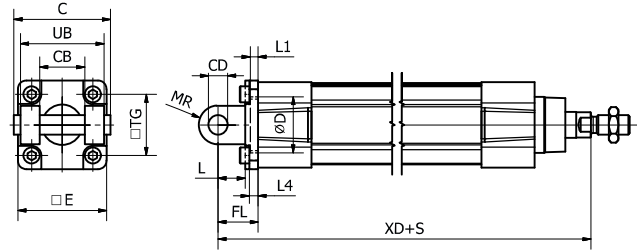
Clevis Bracket - MP2



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

Materials:

Clevis bracket: Aluminium
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	C	E	UB	CB	TG	FL	L1	L	L4	D	CD	MR	XD	Weight	Order code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	
Ø32	53	45	45	26	32.5	22	5	13	5.5	30	10	10	142	0.08	P1C-4KMTB
Ø40	60	52	52	28	38	25	5	16	5.5	35	12	12	160	0.10	P1C-4LMTB
Ø50	68	65	60	32	46.5	27	5	16	6.5	40	12	12	170	0.18	P1C-4MMTB
Ø63	78	75	70	40	56.5	32	5	21	6.5	45	16	16	190	0.24	P1C-4NMTB
Ø80	98	95	90	50	72	36	5	22	10	45	16	16	210	0.49	P1C-4PMTB
Ø100	118	115	110	60	89	41	5	27	10	55	20	20	230	0.73	P1C-4QMTB
Ø125	139	140	130	70	110	50	7	30	10	60	25	25	275	1.37	P1C-4RMTB

*Does not apply to cylinders with piston rod extension or lock units.

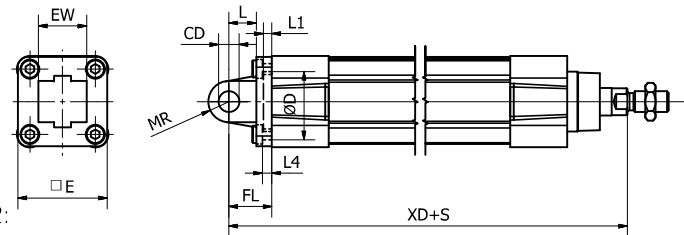
Clevis Bracket - MP4



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

Materials:

Clevis bracket: Aluminium
Bush: PTFE
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	CD	D	E	EW	FL	L	L1	L4	MR	TG	XD	Weight	Order code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	
Ø32	10	30	47	26	22	12	6.5	6	10.5	32.5	142	0.08	P1C-4KMEB
Ø40	12	35	52	28	25	16	5	5.5	12	38	160	0.11	P1C-4LMEB
Ø50	12	40	65	32	27	16	5	6.5	12	46.5	170	0.18	P1C-4MMEB
Ø63	16	45	78	40	32	21	5	6.5	16	56.5	190	0.28	P1C-4NMEB
Ø80	16	45	95	50	36	22	5	10	16	72	210	0.52	P1C-4PMEB
Ø100	20	55	115	60	41	27	5	10	20	89	230	0.79	P1C-4QMEB
Ø125	25	60	140	70	50	30	7	10	25	110	275	1.46	P1C-4RMEB

*Does not apply to cylinders with piston rod extension or lock units.

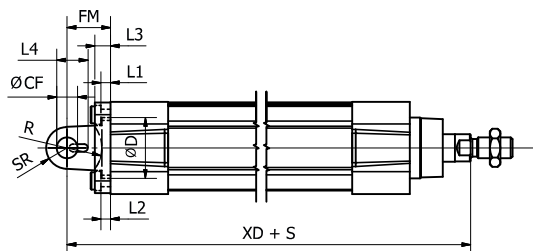
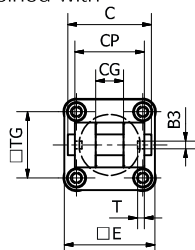
Clevis Bracket - AB6



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
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	B3	C	CF	CG	CP	D	E	FM	I2	T	R	L1	L4	L3	SR	TG	XD*	Weight	Order code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	
Ø32	3.3	41	10	14	34	30	45	22	5.5	3	17	5	16.5	9	10	32.5	142	0.04	P1C-4KMCB
Ø40	4.3	48	12	16	40	35	52	25	5.5	4	20	5	18	9	12	38	160	0.07	P1C-4LMCB
Ø50	4.3	54	16	21	45	40	65	27	6.5	4	22	5	22	11	14	46.5	170	0.11	P1C-4MMCB
Ø63	4.3	60	16	21	51	45	75	32	6.5	4	25	5	22	11	18	56.5	190	0.19	P1C-4NMCB
Ø80	4.3	75	20	25	65	45	95	36	10.0	4	30	5	26	14	20	72	210	0.38	P1C-4PMCB
Ø100	6.3	85	20	25	75	55	115	41	10.0	4	32	5	26	14	22	89	230	0.61	P1C-4QMCB
Ø125	6.3	110	30	37	97	60	140	50	10.0	6	42	7	39	20	25	110	275	1.10	P1C-4RMCB

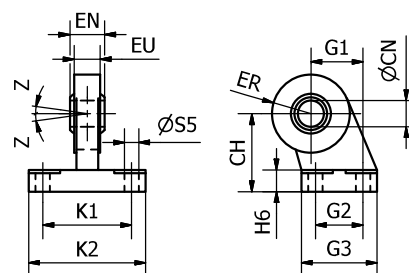
Pivot Bracket with Swivel Bearing - CS7



Intended for use together with clevis bracket AB6.

Materials:

Pivot bracket: Surface-treated steel
Swivel bearing acc. to DIN 648K:
Hardened steel



According to ISO 15552

Cyl.-bore	CN	S5	K1	K2	EU	G1	G2	EN	G3	CH	H6	ER	Z	Weight	Order code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[kg]	
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

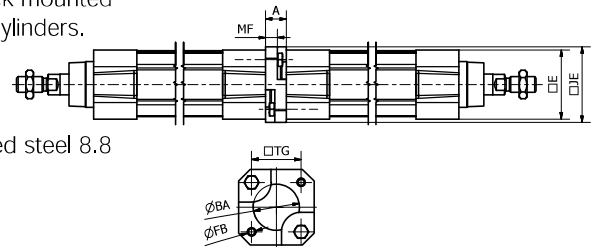
*Does not apply to cylinders with piston rod extension or lock units.

3 and 4 Position Flange - JP1



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

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



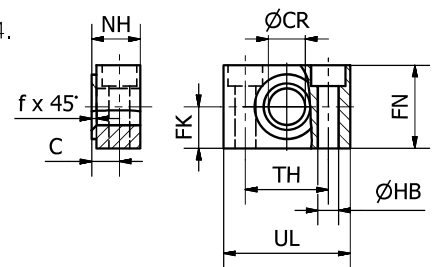
Cyl.-bore	A	ØBA	E	ØFB	JE	MF	TG	Weight	Order code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	
Ø32	16	30	47	6.5	50	9	32.5	0.04	P1E-6KB0
Ø40	16	35.5	53	6.5	58	9	38.0	0.07	P1E-6LB0
Ø50	20	40.5	64.5	8.5	66	6	46.5	0.08	P1E-6MB0
Ø63	20	45.5	75	8.5	80	6	56.5	0.16	P1E-6NB0
Ø80	25	45.5	94	10.5	99	8	72.0	0.30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

Pivot Brackets for MT Trunnion - AT4



Intended for use together with trunnion MT4.

Materials:
Pivot bracket: Surface-treated aluminium
Bush: Bronze
Supplied in pairs



According to ISO 15552

Cyl.-bore	UL	NH	TH	C	CR	HB	FN	FK	fx45°	Weight	Order code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	
Ø32	46	18	32	10.5	12	6.6	30	15	1.0	0.08	9301054261
Ø40	55	21	36	12.0	16	9	36	18	1.6	0.14	9301054262
Ø50	55	21	36	12.0	16	9	36	18	1.6	0.14	9301054262
Ø63	65	23	42	13.0	20	11	40	20	1.6	0.21	9301054264
Ø80	65	23	42	13.0	20	11	40	20	1.6	0.21	9301054264
Ø100	75	28.5	50	16.0	25	14	50	25	2.0	0.36	9301054266
Ø125	75	28.5	50	16.0	25	14	50	25	2.0	0.36	9301054266

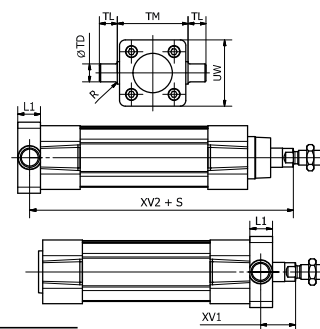
Flange Trunnion - MT5 / MT6



Intended for articulated mounting of cylinder. This trunnion can be flange mounted on the front or rear end cover of the cylinder.

Materials:

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



According to ISO 15552

Cyl.-bore	L1	R	TD _(e9)	TL _(h14)	TM _(h14)	UW	XV1*	XV2*	Weight	Order code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	
Ø32	14	1.0	12	12	50	46	19.5	127.0	0.14	P1D-4KMYF
Ø40	19	1.6	16	16	63	59	21.0	144.5	0.39	P1D-4LMYF
Ø50	19	1.6	16	16	75	69	28.0	152.5	0.51	P1D-4MMYF
Ø63	24	1.6	20	20	90	84	25.5	170.0	1.04	P1D-4NMYF
Ø80	24	1.6	20	20	110	102	34.5	186.0	1.57	P1D-4PMYF
Ø100	29	2.0	25	25	132	125	37.0	203.5	3.00	P1D-4QMYF

*Does not apply to cylinders with piston rod extension or lock units.

To fit a flange mounted trunnion at the front end cover of a cylinder with lock unit, the piston rod must be extended. This is in order to provide the same WH dimensions as for the P1F base cylinder.

Centre Trunnion - MT4

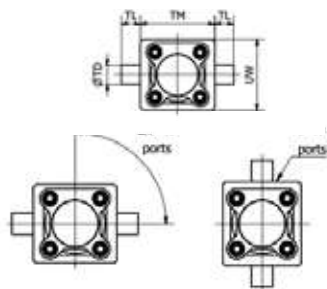
Centre Trunnion Smooth Profile Tube



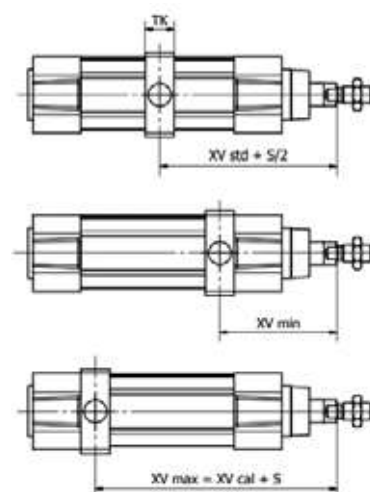
Available for P1F Profile and tie rod versions the MT4 centre trunnion when combined with AT4 pivot brackets is intended for articulated mounting of the cylinder. The trunnion is free so that it can be fixed afterward when the cylinder is at the right place on the machine.

Material: Zinc plated steel

Centre Trunnion Tie-Rods Tube



Trunnion loose. The centre trunnion can also be supplied loosely fitted to the cylinder (not fixed in position). This allows the position to be set at the time of installation. Order with a letter / number in position 17 and 000 in positions 18-20. Please refer to the order code key. Note: No decimals are used in positions 18-20.



According to ISO 15552					P1F-S/K				P1F-T/N				P1F-L	P1F-H	Order Code	
Cyl.-bore	TL _{h14}	TM _{h14}	ØTD _{e9}	XV _{std}	TK	UW	XV _{min}	XV _{cal}	TK	UW	XV _{min}	XV _{cal}	Adder to XV		Smooth Profile	Tie-Rods
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		
Ø32	12	50	12	73.0	18	52	78.0	68.0	15	46	63.0	83.0	32.0	48.0	P1F-4KMY	P1F-4KMYT
Ø40	16	63	16	83.0	20	60	84	81.0	20	59	74.0	91.0	30.0	55.0	P1F-4LMY	P1F-4LMYT
Ø50	16	75	16	90.0	20	71	97	83.0	20	69	82.0	98.0	29.0	70.0	P1F-4MMY	P1F-4MMYT
Ø63	20	90	20	98.0	26	84	100	95.0	25	84	90.0	105.0	39.0	70.0	P1F-4NMY	P1F-4NMYT
Ø80	20	110	20	110.0	26	105	116	104.0	25	102	99.0	121.0	45.0	90.0	P1F-4PMY	P1F-4PMYT
Ø100	25	132	25	120.0	32	129	122	118.0	30	125	112.0	128.0	57.0	92.0	P1F-4QMY	P1F-4QMYT
Ø125	25	160	25	145.0	33	154	157	133.0	33	155	134.0	156.0	56.0	122.0	P1F-4RMY	P1F-4RMYT

Swivel Rod Eye - AP6

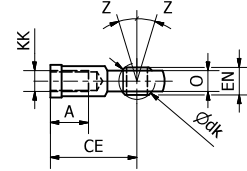
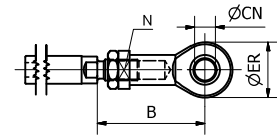


Swivel rod eye for articulated mounting of the cylinder. Swivel rod eye can be combined with clevis bracket AB6.

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 ISO 8139

Cyl.-bore	A	B _{min}	B _{max}	CE	CN	EN	ER	KK	LE dk	N	O	Z	Weight	Order Code	
														Galvanised steel	Stainless steel
Ø32	15	48.0	55	43	10	14	29	M10x1.25	19.0	17	10.5	13°	0.07	P1C-4KRS	P1S-4JRT
Ø40	18	56.0	62	50	12	16	33	M12x1.25	22.2	19	12.0	13°	0.11	P1C-4LRS	P1S-4LRT
Ø50	24	72.0	80	64	16	21	43	M16x1.5	28.5	22	15.0	15°	0.21	P1C-4MRS	P1S-4MRT
Ø63	24	72.0	80	64	16	21	43	M16x1.5	28.5	22	15.0	15°	0.21	P1C-4MRS	P1S-4MRT
Ø80	30	87.0	97	77	20	25	51	M20x1.5	34.9	30	18.0	15°	0.38	P1C-4PRS	P1S-4PRT
Ø100	30	87.0	97	77	20	25	51	M20x1.5	34.9	30	18.0	15°	0.38	P1C-4PRS	P1S-4PRT
Ø125	45	123.5	137	110	30	37	70	M27x2	50.8	41	25.0	15°	1.15	P1C-4RRS	P1S-4RRT

Clevis - AP2

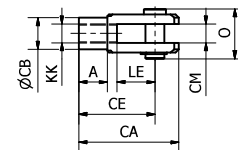
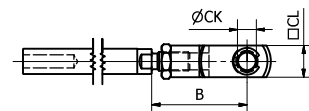


Clevis for articulated mounting of the cylinder.

Materials:

Clevis, clip: Zinc-plated steel
Pin: Hardened steel

Clevis, clip: Stainless steel
Pin: Stainless steel



According to ISO 15552

Cyl.-bore	A	B _{min}	B _{max}	CA	CB	CE	CK	CL	CM	KK	LE	O	Weight	Order code	
														Galvanised steel	Stainless steel
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
Ø125	40	123.5	137	148	48	110	30	55	30	M27x2.0	54	65	1.80	P1C-4RRC	P1S-4RRD

Flexo Coupling - PM5

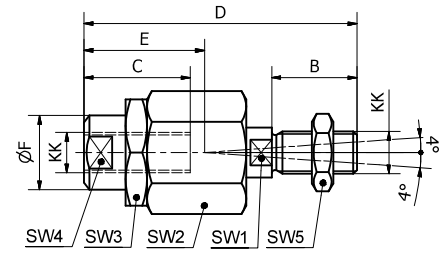


Flexo coupling for articulated mounting of piston rod. Flexo fitting is intended to take up axial angle errors within a range of $\pm 4^\circ$.

Materials:

Flexo coupling, nut: Zinc-plated steel

Supplied complete with galvanized adjustment nut.



Cyl. bore	KK	B	C	D	E	ØF	SW1	SW2	SW3	SW4	SW5	Weight	Order code
[mm]		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	
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
Ø125	M27x2	54	48	147	51	39	24	55	55	32	41	1.60	P1C-4RRF

Piston Rod Nuts - MR9

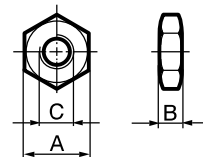
All P1F cylinders are delivered with a zinc plated steel piston rod nut unless specified below.



Material: Zinc-plated steel



Material: Stainless steel A2



According to DIN 439 B

Cyl.-bore	A	B	C	Weight	Order code	
					Zinc plated steel	Stainless steel
[mm]	[mm]	[mm]	[mm]	[kg]		
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
Ø125	41	13.5	M27 x 2.0	0.100	P14-4RRPZ	P14-4RRPS

*Weight per item

Drop-in sensors

The P8S sensors can easily be installed from the side in the sensor groove, at any position along the piston stroke. The sensors are completely recessed and thus mechanically protected. Choose between electronic or reed sensors and several cable lengths and 8 mm and M12 connectors.



Electronic sensors

The electronic sensors are "Solid State", i.e. they have no moving parts at all. They are provided with short-circuit protection and transient protection as standard. The built-in electronics make the sensors suitable for applications with high on and off switching frequency, and where very long service life is required.

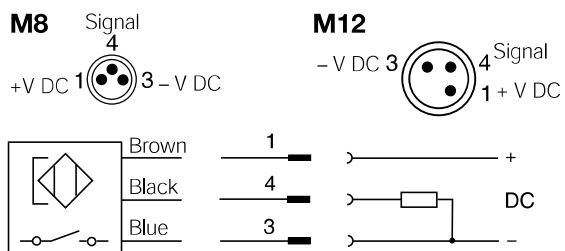
Reed sensors

The sensors are based on proven reed switches, which offer reliable function in many applications. Simple installation, a protected position on the cylinder and clear LED indication.

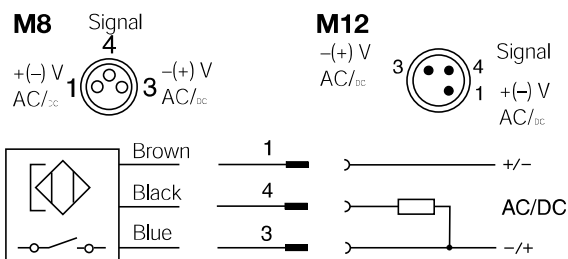
	Electronic	Reed
Cylinder type:	Profile with T-slot	
Cylinder type with adaptor:	Profile with S-slot (dovetail) Tie rods Round cylinders	
Installation:	Drop-in. Fixed by 1.5 mm stainless steel allen key or flathead screwdriver.	
Housing length:	34.7 mm 31.5 mm (ATEX)	
Output Type / Function:	PNP, Normally Open (NO) NPN, Normally Closed (NC)	Normally Open (NO) Normally Closed (NC)
Switching (on/off) switching frequency:	≤1000 Hz	± 400 Hz
Degree of Protection (IP):	IP67	
Power consumption:	≤ 10 mA	-
Input Supply Voltage Range:	10 to 30 V DC 18 to 30 V DC (ATEX)	10 to 30 10 to 120 10 to 230 V AC/DC (2-wire) 10 to 30 V AC/DC (3-wire)
Voltage Drop:	≤ 2,2 V	≤ 3,5 V (2-wire NO) ≤ 0,1 V (3-wire) ≤ 0,1 V (2-wire NC)
Continuous output current:	≤ 100 mA ≤ 70 mA (ATEX)	≤ 100 mA (2-wire NO) ≤ 500 mA (3-wire) ≤ 500 mA (2-wire NC)
Switching capacity:	-	≤ 10 W
Hazardous area category:	3G / 3D (ATEX)	-
Protection Class:	III	II (2-wire) III (3-wire)
Response Sensitivity:	2.65.. 2.95 mT	2.1.. 3.4 mT
Overrun Distance:	3 mm	9 mm
Hysteresis:	≤ 0.5 mT	≤ 0.2 mT
Repeatability:	≤ 0.1 mT	
Reverse Polarity Protection:	Yes	
Short-circuit Protection:	Yes	-
Power-up Pulse Protection:	Yes	-
Ambiant Operating Temperature Range:	-25 to +75 °C (PUR cable) -20 to +70°C (PVC cable) -20 to +45°C (ATEX)	
Shock and Vibration resistance:	30 g 11 ms / 10 ... 55 Hz, 1 mm	
EMC:	According to EN 60947-5-2	
Industry Standard:	CE C UL US RoHs Ex	CE C UL US RoHs
UL Certification:	On request	
Housing Material:	Plastic polyamid PA12 (ATEX) PA66	Plastic polyamid PA12 (2-wire 240V) PA66
Cable Specification:	PUR (Polyurethane) PVC (Polyvinyl Chloride)	
Conductor Cross-Section:	0.14 mm ² (3 wire)	0.14 mm ² (3-wire) 0.12 mm ² (2-wire)
Colour of LED:	Yellow	
Connection Style:	M8 snap-in M8R (knurled nuts) M12 (knurled nuts) None (Flying lead)	

PDE3570TCEN Pneumatic Cylinders ISO 15552

Electronic sensors



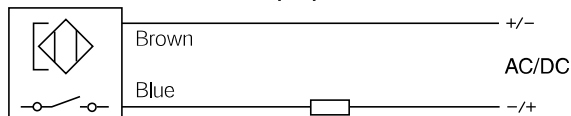
Reed sensors



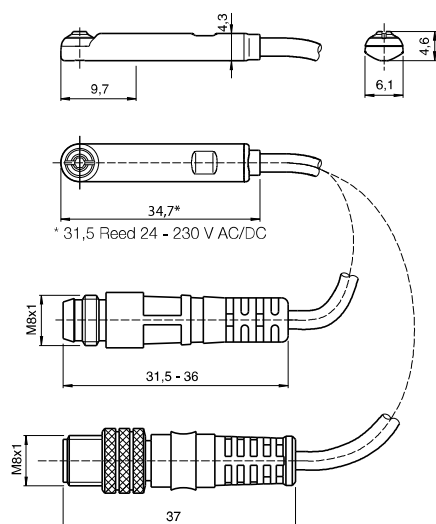
P8S-GCFPX (NC)



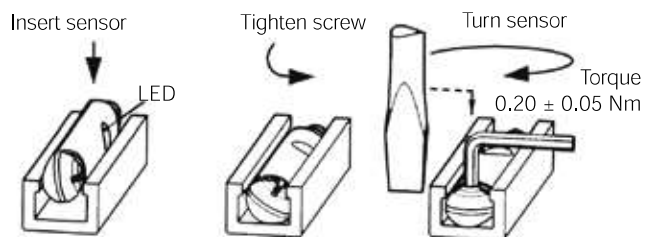
P8S-GRFLX / P8S-GRFLX2 (NO)



Dimensions [mm]

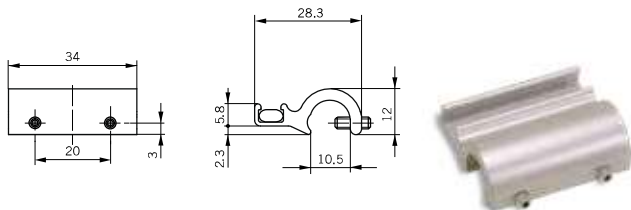


Sensor Installation

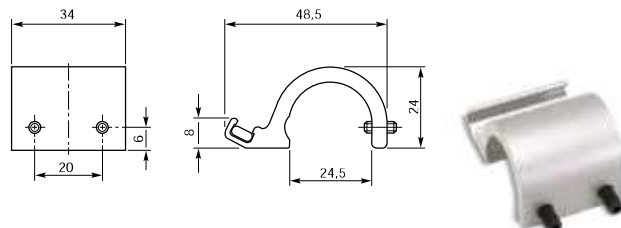


Brackets for sensors for Tie-Rods version

Oder code: PD48955 - bores $\varnothing 32$ to $\varnothing 100$ mm



Oder code: PD48956 - bore $\varnothing 125$ mm



Ordering data

Output/function	Cable/connector	Weight [kg]	Order code
Electronic sensors, 10-30 V DC			
PNP type, normally open	0.27 m PUR cable and 8 mm snap-in male connector	0.007	P8S-GPSHX
PNP type, normally open	0.27 m PUR cable and M12 screw male connector	0.015	P8S-GPMHX
PNP type, normally open	3 m PVC cable without connector	0.030	P8S-GPFLX
PNP type, normally open	10 m PVC cable without connector	0.110	P8S-GPFTX
Reed sensors, 10-30 V AC/DC			
Normally open	0.27 m PUR cable and 8 mm snap-in male connector	0.007	P8S-GSSHX
Normally open	0.27 m PUR cable and M12 screw male connector	0.015	P8S-GSMHX
Normally open	3 m PVC cable without connector	0.030	P8S-GSFLX
Normally open	10 m PVC cable without connector	0.110	P8S-GSFTX
Normally closed	5 m PVC cable without connector without LED	0.050	P8S-GCFPX
Reed sensors, 10-120 V AC/DC			
Normally open	3 m PVC cable without connector	0.030	P8S-GRFLX
Reed sensors, 24-230 V AC/DC			
Normally open	3 m PVC cable without connector	0.030	P8S-GRFLX2

Male connectors for connecting cables

Cable connectors for producing your own connecting cables. The connectors can be quickly attached to the cable without special tools. Only the outer sheath of the cable is removed. The connectors are available for M8 screw connectors and meet protection class IP 65.



Technical data

Operating voltage:	max. 32V AC/DC
Operating current per contact:	max. 4 A
Connection cross section:	0.25.... 0.5 mm ² (conductor diameter min 0.1)
Protection class:	IP65 And IP 67 when plugged and screwed down (EN 60529)
Temperature range:	- 25... +85°C

Connector	Weight [kg]	Order Code
M8 screw connector	0,018	P8CS0803J
M12 screw connector	0,022	P8CS1204J

Connecting cables

Description	Weight [g]	For Product Series	Order Code
Cable flex PVC 3 meter with 8mm snap-in connector / flying leads	70	P8S Sensors with M8	9126344341
Cable flex PVC 10 meter with 8mm snap-in connector / flying leads	210	P8S Sensors with M8	9126344342
Cable PUR 3 meter with 8mm snap-in female connector / flying leads	70	P8S Sensors with M8	9126344345
Cable flex PUR 10 meter with 8mm snap-in connector / flying leads	210	P8S Sensors with M8	9126344346
Cable PVC 2.5 meter with M8 screw connector / flying leads	60	P8S Sensors with knurled M8	KC3102
Cable PVC 5 meter with M8 screw female connector / flying leads	120	P8S Sensors with knurled M8	KC3104

Continuous Position Sensing

Analogue signal or IO-Link communication for linear cylinders many applications require more than just end of stroke sensing of an actuator, but traditional methods of continuous sensing are expensive and difficult to implement. Parker's CPS series of the P8S sensor family enables quick, easy, precise, and contactless position sensing of a piston. This can be installed on a standard linear actuator and offers an outstanding price to performance ratio.

Product Features:

Continuous position sensing

- IO-Link communication with M12 connector
- No modification to the actuator
- Analogue version with M8 connector
- 5 sizes with sensing ranges from 32 mm to 256 mm
- IP67 design suitable for any industrial application
- Yellow teach button for easy set-up

Technical specification:

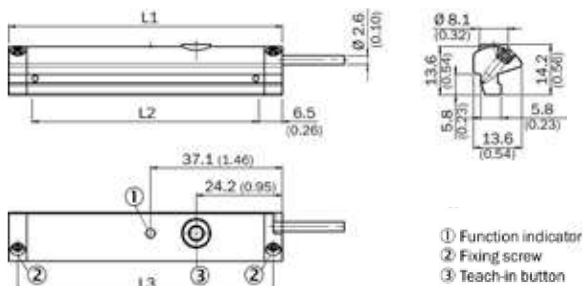
1 ms sampling rate
 0.03% full scale resolution
 0.06% full scale repeatability
 0.3 mm Linearity error

How it installs:

The Parker CPS requires the use of a magnetic piston. The product will fit T-slot cylinders without any additional mounting hardware.

1. Pivot the sensor into the slot
2. Teach the CPS unit the desired measuring range
3. Tighten set screws

Dimensions in mm (inch)

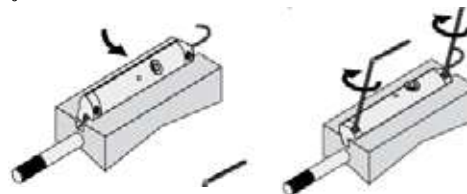


How it connects:

Analogue version has a M8 connector and a voltage output of 0-10V as well as a current output of 4-20mA. IO-Link version has a M12 connector and transmits position via 2 bytes of process input data and also allows for parameter control of measuring range and locking of the teach button. It can be controlled by Class A or Class B IO-Link Masters.

How it works:

The CPS product detects the position of an actuator via the magnet on the piston. The sensor settings can easily be adjusted during installation using the yellow teach button or during operation over the IO-Link communication. This upgrades the functionality of the pneumatic actuator by making it more intelligent and versatile in support of the Industry 4.0 initiative.



Order Code				
L1	L2 *	L3	Analogue	IO-Link
45	32	40	P8SAGACHA	P8SAGHMHA
77	64	72	P8SAGACHB	P8SAGHMHB
141	128	136	P8SAGACHD	P8SAGHMHD
205	192	200	P8SAGACHF	P8SAGMHMF
269	256	264	P8SAGACHH	P8SAGMHMH

*L2 equal to the measuring range

Ordering Data

Drop in T-slot, Turn, Screw, it's done

Output	Measuring length	Configuration Option	Order Code	Weight [g]	For product series
Analogue	32 mm	Teach Button	P8SAGACHA	16	With T-slot groove *
	64 mm		P8SAGACHB	26	
	128 mm		P8SAGACHD	46	
	192 mm		P8SAGACHF	66	
	256 mm		P8SAGACHH	86	
IO-Link	32 mm	Teach Button or IO-Link parameter	P8SAGHMHA	20	With T-slot groove *
	64 mm		P8SAGHMHB	30	
	128 mm		P8SAGHMHD	50	
	192 mm		P8SAGMHMF	70	
	256 mm		P8SAGMHMH	90	

* Required magnetic field sensitivity: 3mT / -2 mT (Analogue) / 3mT (IO-Link)

Note: PUR cable with M12 (IO-Link) or M8 (Analogue) male connector knurled nut, 4-pin, 0.3 meter length. Please consult for measuring range 96, 160 & 224 mm.

Seal Kits

Complete seal kits consisting of:

- 2 piston seals.
- 2 cushioning seals.
- 1 wiper / piston rod seal.
- 2 O-Rings.

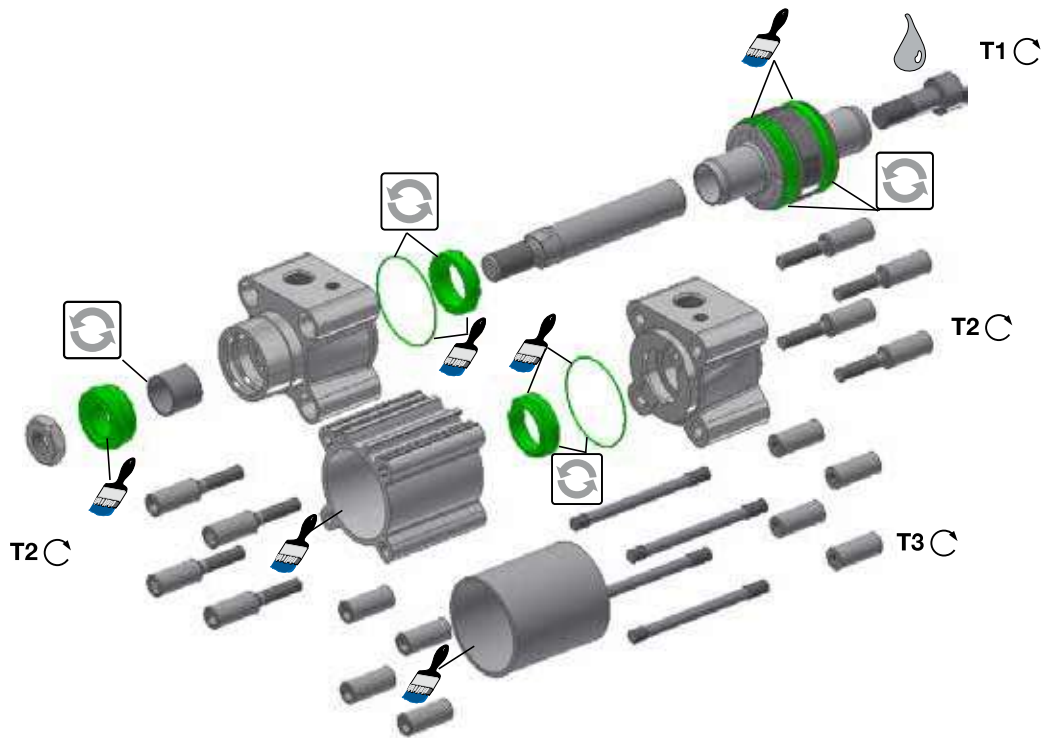
Greases

	Standard	30 g	9127394541
	High temperature	30 g	9127394521
	Low temperature	30 g	9127394541

Cyl.-bore [mm]	Standard temperature ¹⁾	High temperature ¹⁾	Low temperature ¹⁾	Metallic scraper ¹⁾²⁾	FKM Wiper seal ¹⁾	With dyn. rod lock ¹⁾	With static rod lock ¹⁾
Ø32	P1F-6032RN	P1F-6032RF	P1F-6032RL	P1F-6032RQ	P1F-6032RV	P1F-6032RNL	P1F-6032RNH
Ø40	P1F-6040RN	P1F-6040RF	P1F-6040RL	P1F-6040RQ	P1F-6040RV	P1F-6040RNL	P1F-6040RNH
Ø50	P1F-6050RN	P1F-6050RF	P1F-6050RL	P1F-6050RQ	P1F-6050RV	P1F-6050RNL	P1F-6050RNH
Ø63	P1F-6063RN	P1F-6063RF	P1F-6063RL	P1F-6063RQ	P1F-6063RV	P1F-6063RNL	P1F-6063RNH
Ø80	P1F-6080RN	P1F-6080RF	P1F-6080RL	P1F-6080RQ	P1F-6080RV	P1F-6080RNL	P1F-6080RNH
Ø100	P1F-6100RN	P1F-6100RF	P1F-6100RL	P1F-6100RQ	P1F-6100RV	P1F-6100RNL	P1F-6100RNH
Ø125	P1F-6125RN	P1F-6125RF	P1F-6125RL	P1F-6125RQ	P1F-6125RV	P1F-6125RNL	P1F-6125RNH

¹⁾ for through piston rod, add K at the end, ie P1F-6032RNK

²⁾ -30 to +80°C



Cyl.-bore [mm]	Plastic piston T1 [Nm]	Al Piston T1 [Nm]	AF [mm]	T2 [Nm]	AF [mm]	T3 [Nm]
Ø32	4.5	15	6	8	6	6
Ø40	11	30	8	8	6	6
Ø50	20	40	10	20	8	11
Ø63	20	40	10	20	8	11
Ø80	40	120	14	20	6	20
Ø100	120	120	14	20	6	20
Ø125	120	120	14	70	8	40



= Included in seal kit



= Socket head across flats



= Tightening torque



Lubricated with grease



Locking fluid
Loctite 270 or Loctite 2701 locking fluid must be used



FLUIDTECHNIK[®]
bohemia

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