

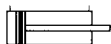
Cylinder

ø 32-100 mm

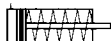
Versions:

- For contactless position sensing as standard
- Single acting without adjustable end cushioning – normally retracted
- Single acting without adjustable end cushioning – normally extended
- Double acting without adjustable end cushioning
 - Option of internal or external mounting on piston rod

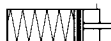
Series NZK....



NZK 6...



NZK 7...



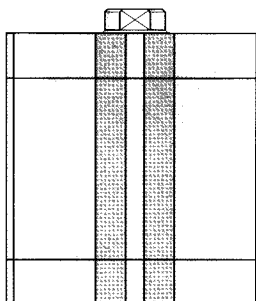
NZK 8...

Special versions:

- High temperature version (+150°)

The cylinder profile has grooves in which, depending on stroke length, one more magnetic proximity sensors can be mounted for sensing the end positions or intermediate positions of the magnetic piston.

Proximity sensors are not included – please order these separately.



Characteristics according to VDI 3294

Pressures quoted as gauge pressure

Characteristics	Symbol	Unit	Description					
General Features								
Type			Piston rod cylinder					
Series			NZK 6, NZK 7, NZK 8					
Series NZK 6...			Double acting without cushioning for contactless position sensing					
Series NZK 7..., NZK 8...			Single acting without cushioning for contactless position sensing					
Mounting			See drawing					
Tube connection			Thread					
Ambient temperature range	ϑ_{\min} ϑ_{\max}	°C	-20	Note: When using below freezing point (°C) it is necessary to consult us				
Medium-temperature range	ϑ_{\max}	°C	+8					
Weight (mass)		kg	See table					
Installation			In any position					
Medium			Filtered and lubricated or filtered and unlubricated compressed air					
Lubrication			Oil mist lubrication compatible with polyurethan					
Material	Cylinder tube		Aluminium					
	Front/Rear covers		Aluminium					
	Piston rod		Stainless steel					
Pneumatic Characteristics								
Nominal pressure	p_n	bar	6					
Operating pressure	p_{\min} p_{\max}	bar bar	0,5 (Single acting version : 1,0) 10					
Piston diameter		mm	32	40	50	63	80	100
Port size			G1/8	G1/8	G1/8	G1/8	G1/8	G1/4
Piston rod diameter		mm	12	16	20	20	25	25
Piston rod thread			M6	M6	M8	M8	M10	M12
			1) M10x1,25 M12x1,25 M16x1,5 M16x1,5 M20x1,5 M20x1,5					
Stroke length		mm	Double acting version: see order instructions Single acting versin: 5, 10, 15, 20, 25					
Piston force and air consumption			see Data-Sheet 2.05.001					
Cushioning			Elastomer cushioning at both ends					
Spring return force	max.	N	see diagramm					

1) Piston rod thread on series NZK..../-...-AG

Weight (mass) kg

Mounting	Cylinder - Ø											
	32		40		50		63		80		100	
	*1	*2	1	2	1	2	1	2	1	2	1	2
Basic Cyl.	0,35		0,48		0,68		1,17		1,68		2,61	
A	0,55		0,73		0,88		1,57		2,48		3,51	
B	0,45		0,58		0,83		1,37		2,08		3,21	
BA	0,55	0,042	0,68	0,057	0,78	0,079	1,57	0,096	2,48	0,130	3,61	0,175
BAS	0,50		0,68		0,78		1,47		2,18		3,51	
C	0,50		0,58		0,73		1,52		2,18		3,51	
D	0,50		0,58		0,73		1,52		2,18		3,51	

*1 = Cylinder weight (10 mm stroke)

*2 = Weight per further 10 mm stroke length

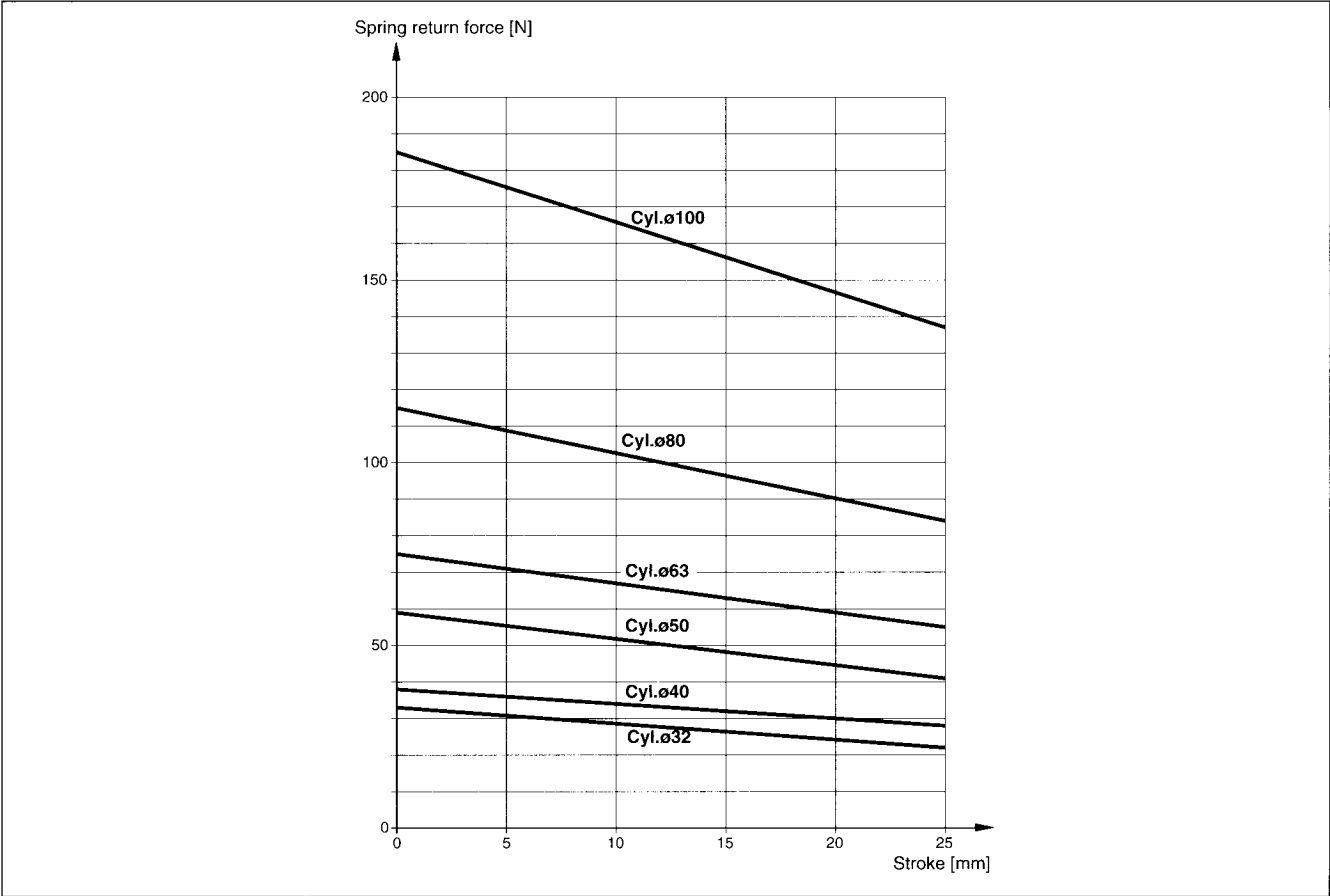
For cylinder switches see siehe 2.90.037, 2.90.038

For product group list see 2.01.001

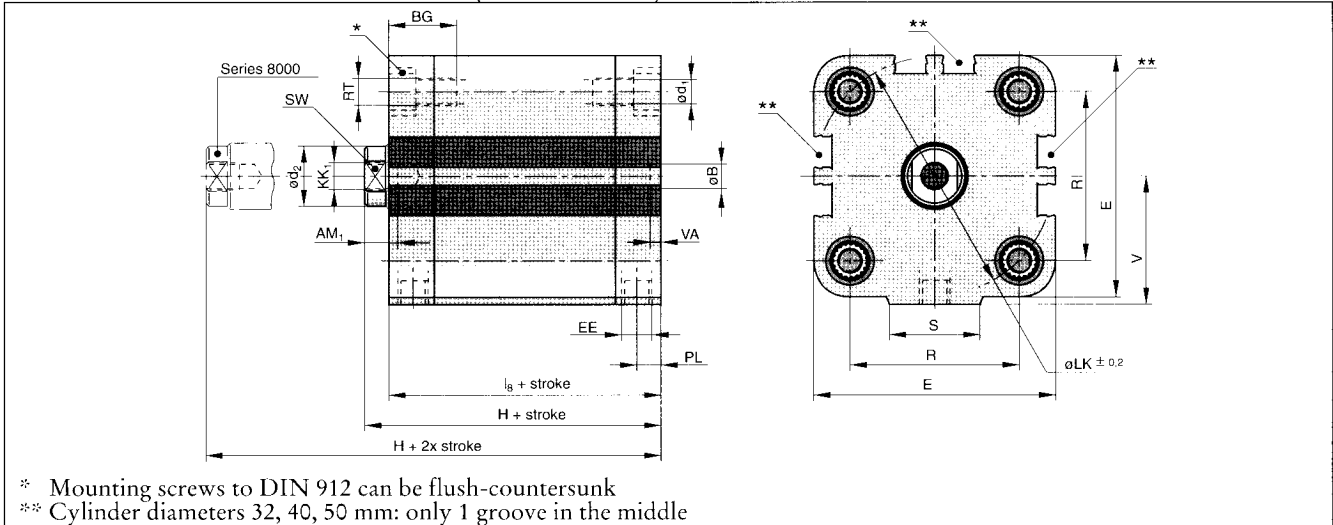
HOERBIGER
ORIGA

Theoretical Spring Return Forces in relation to Stroke Length

Series NZK 7000, NZK 8000



Dimensions for Basic Cylinder
Version: Piston Rod with Internal Thread (Series NZK..../...)

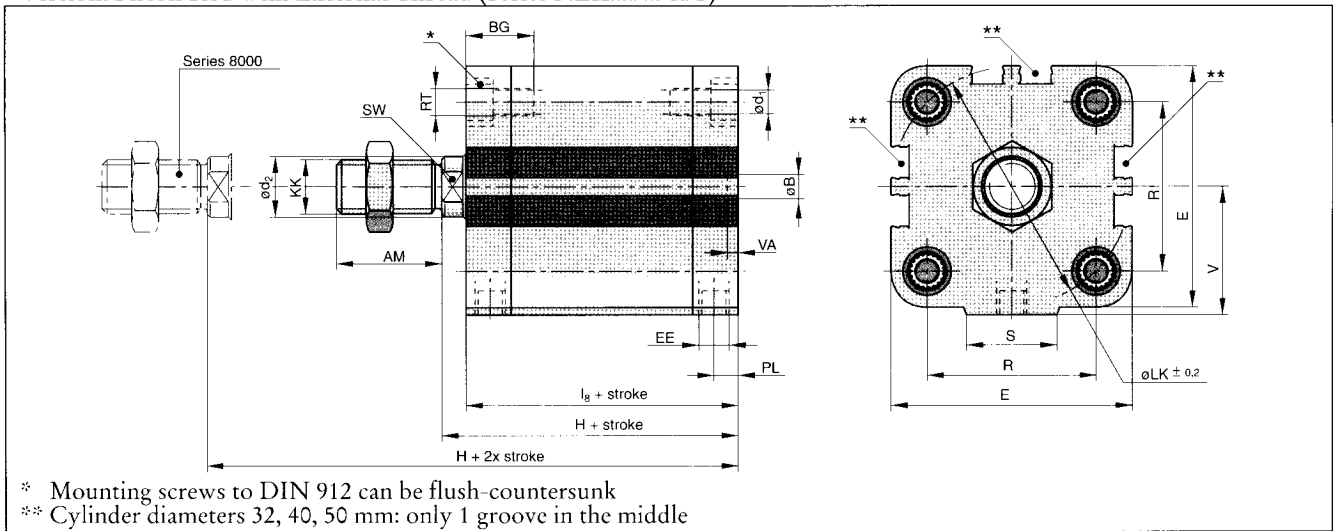


Dimension Table (mm) for Basic Cylinder

Cyl. ø	AM ₁	øB H9	BG	ød ₁	ød ₂	E	EE	H (* +stroke)	KK ₁	l _g +stroke	øLK	PL	R	RT	S	SW	V	VA
32	12	6	21	5,5	12	50	G1/8	50,5	M6	44,5	46	8	32,5	M6	21	10	26,5	4
40	12	6	21	5,5	16	57	G1/8	52	M6	45,5	54	8	38	M6	22	13	30	4
50	12	6	22,5	6,5	20	67,5	G1/8	53	M8	45,5	66	8	46,5	M8	25	17	35,75	4
63	12	8	22,5	6,5	20	81	G1/8	57,5	M8	50	80	8	56,5	M8	30	17	43,5	4
80	16	8	27,5	8,5	25	98	G1/8	64	M10	56	102	8,5	72	M10	40	19	53	4
100	20	8	32,5	8,5	25	119	G1/4	76,5	M12	66,5	126	10,5	89	M10	50	22	62,5	4

(* Series NZK 8000: H + 2x stroke)

Dimensions for Basic Cylinder
Version: Piston Rod with External Thread (Series NZK..../...-AG)

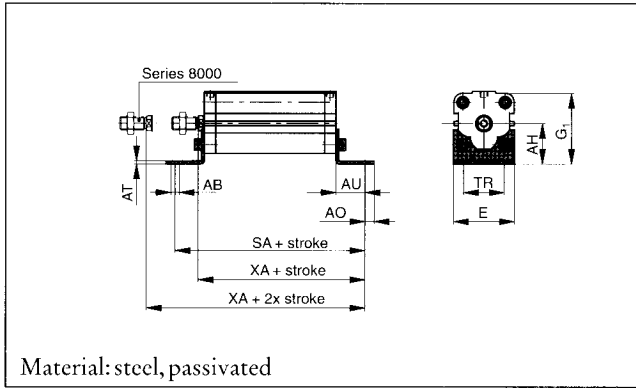


Dimension Table (mm) for Basic Cylinder

Cyl. ø	AM	øB H9	BG	ød ₁	ød ₂	E	EE	H (* +stroke)	KK	l _g +stroke	øLK	PL	R	RT	S	SW	V	VA
32	20	6	21	5,5	12	50	G1/8	50,5	M10x1,25	44,5	46	8	32,5	M6	21	10	26,5	4
40	24	6	21	5,5	16	57	G1/8	52	M10x1,25	45,5	54	8	38	M6	22	13	30	4
50	32	6	22,5	6,5	20	67,5	G1/8	53	M16x1,5	45,5	66	8	46,5	M8	25	17	35,75	4
63	32	8	22,5	6,5	20	81	G1/8	57,5	M16x1,5	50	80	8	56,5	M8	30	17	43,5	4
80	40	8	27,5	8,5	25	98	G1/8	64	M20x1,5	56	102	8,5	72	M10	40	19	53	4
100	40	8	32,5	8,5	25	119	G1/4	76,5	M20x1,5	66,5	126	10,5	89	M10	50	22	62,5	4

(* Series NZK 8000: H + 2x stroke)

Dimensions for Mounting A

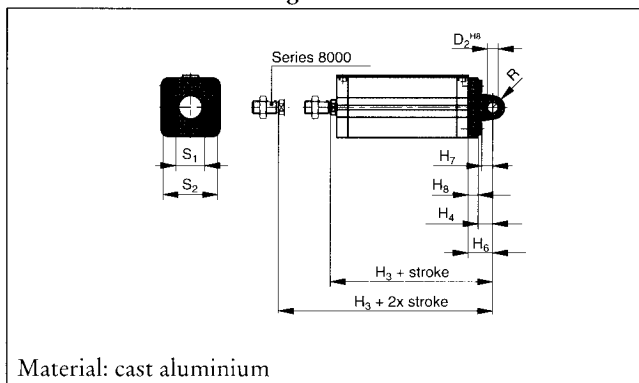


Dimension Table (mm) for Mounting A

Cyl. Ø	AB Ø	AH	AO	AT	AU	E	G ₁	TR	SA+stroke	XA+stroke(*)
32	7	32	8	3	24	47	58,5	32	92,5	74,5
40	9	36	10	3	28	53	66	36	101,5	80
50	9	45	10	3	32	65	81	45	109,5	85
63	9	50	10	3	32	75	93,5	50	114	89,5
80	12	63	14	4	41	95	116	63	138	105
100	14	71	15	4	41	115	133,5	75	148,5	117,5

(*) Series NZK 8000: XA + 2x stroke

Dimensions for Mounting B

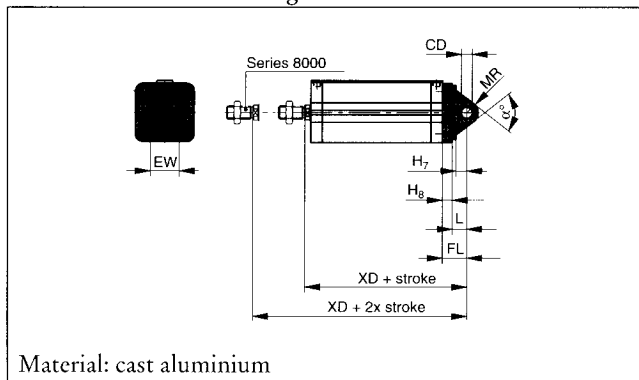


Dimension Table (mm) for Mounting B

Cyl. Ø	ØH8	H ₃ +stroke(*)	H ₄	H ₆	H ₇	H ₈	R	S ₁	S ₂
32	10	72,5	12	22	11	10	9	26	45
40	12	77	15	25	14	10	11	28	52
50	12	80	16	27	15	11	12	32	60
63	16	89,5	21	32	20	11	15	40	70
80	16	100	22	36	21	14	16	50	90
100	20	117,5	25	41	24	16	20	60	110

(*) Series NZK 8000: H₃ + 2x stroke

Dimensions for Mounting BA

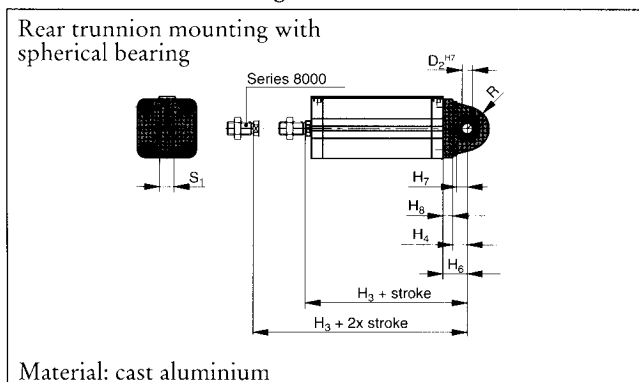


Dimension Table (mm) for Mounting BA

Cyl. Ø	øCD H8	EW	FL	H ₇	H ₈	L	MR	XD(*)+stroke	a°
32	10	26	22	11	10	12	10,5	72,5	60
40	12	28	25	14	10	15	13	77	60
50	12	32	27	15	11	16	13	80	70
63	16	40	32	20	11	21	17	89,5	60
80	16	50	36	20	15	21	17	100	70
100	20	60	41	24	16	25	21	117,5	70

(*) Series NZK 8000: XD + 2x stroke

Dimensions for Mounting BAS

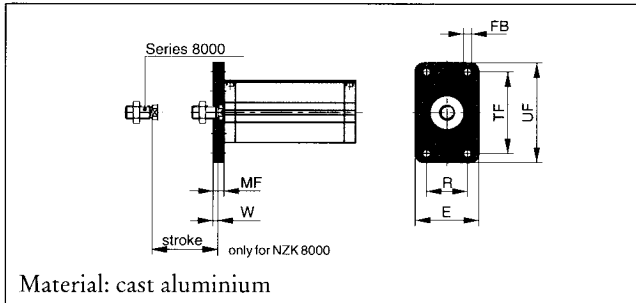


Dimension Table (mm) for Mounting BAS

Cyl. Ø	ØD ₂ H7	H ₃ +stroke(*)	H ₄	H ₆	H ₇	H ₈	R	S ₁
32	10	72,5	12	22	11	10	18	14
40	12	77	15	25	14	10	21	16
50	12	80	16	27	15	11	23	16
63	16	89,5	21	32	20	11	27	21
80	16	100	21	36	20	15	29	21
100	20	117,5	25	41	24	16	34	25

(*) Series NZK 8000: H₃ + 2x stroke

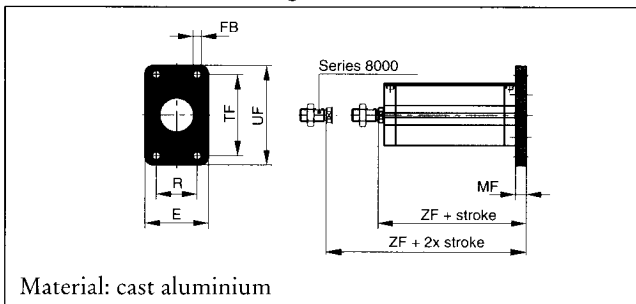
Dimensions for Mounting C



Dimension Table (mm) for Mounting C

Cyl.- Ø	øFB	E	MF	R	TF	UF	W
32	7	50	10	32	64	79	4
40	9	56	10	36	72	90	3,5
50	9	70	12	45	90	110	4,5
63	9	77	12	50	100	120	4,5
80	12	100	16	63	126	153	8
100	14	120	16	75	150	178	6

Dimensions for Mounting D

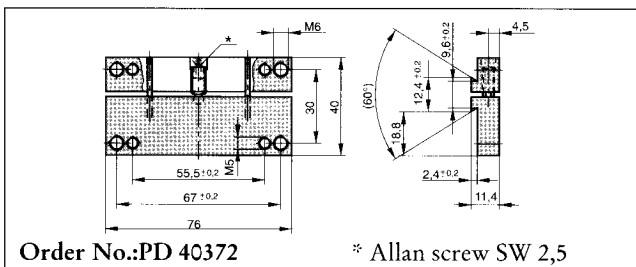


Dimension Table (mm) for Mounting D

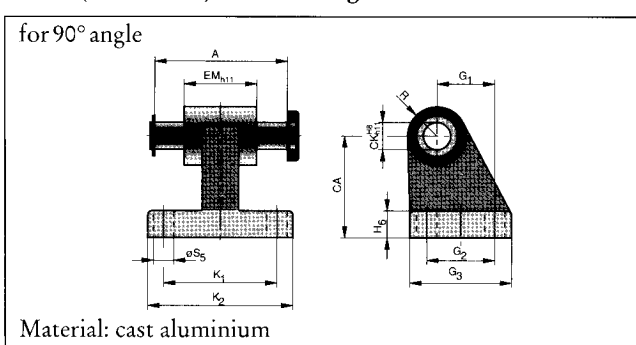
Cyl.- Ø	øFB	E	MF	R	TF	UF	ZF +stroke(1)
32	7	50	10	32	64	79	60,5
40	9	56	10	36	72	90	62
50	9	70	12	45	90	110	65
63	9	77	12	50	100	120	69,5
80	12	100	16	63	126	153	80
100	14	120	16	75	150	178	92,5

(1) bei NZK 8000: ZF+2x stroke

Adapterplate for Mounting S9-Valves G1/8 and G1/4



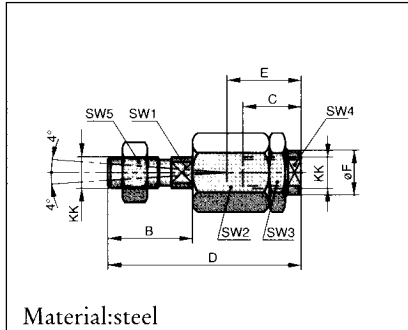
Pivot (series GLN) for Mounting B to VDMA 24562



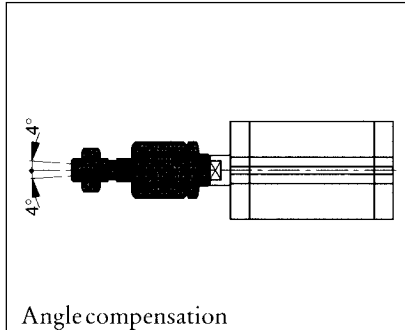
Order Instructions, Dimension Table (mm), Weight

Order Instructions Type	Order No.	Cyl.- Ø	A	CA	CK ¹¹⁸ _{h11}	EM _{h11}	G ₁	G ₂	G ₃	H ₆	K ₁	K ₂	R ₁	øS ₅	Weight (kg)
GLN-032	PD 40844	32	46	32	10	26	21	18	31	8	38	50	10	6,6	0,092
GLN-040	PD 40845	40	53	36	12	28	24	22	35	10	41	53	11	6,6	0,131
GLN-050	PD 40846	50	61	45	12	32	33	30	45	12	50	64	13	9	0,193
GLN-063	PD 40847	63	71	50	16	40	37	35	50	12	52	66	15	9	0,305
GLN-080	PD 40848	80	91	60	16	50	47	40	60	14	66	84	15	11	0,460
GLN-100	PD 40849	100	111	70	20	60	55	50	70	15	76	94	19	11	0,840

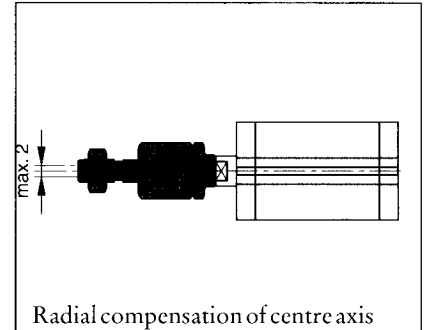
Compensating Coupling for Piston Rod



Material: steel



Angle compensation

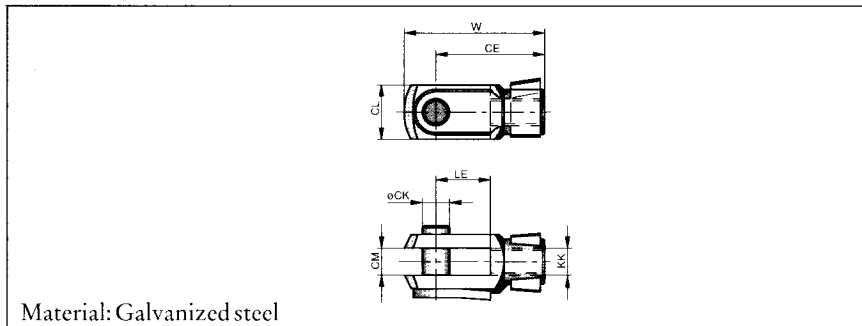


Radial compensation of centre axis

Order Instructions, Dimension Table (mm), Weight

Order Instructions Type	Order No.	Cyl.Ø	B	C	D	E	ØF	KK	SW1	SW2	SW3	SW4	SW5	Weight (kg)
AK-M10x1,25	KY 1129	32	20	23	70	31	21,5	M10x1,25	12	30	30	19	17	0,218
AK-M12x1,25	KY 1131	40	23	23	67	31	21,5	M12x1,25	12	30	30	19	19	0,207
AK-M16x1,5	KY 1133	50,63	40	32	112	45	33,5	M16x1,5	19	41	41	30	30	0,637
AK-M20x1,5	KY 1134	80,100	39	42	122	56	33,5	M20x1,5	19	41	41	30	30	0,711

Piston Rod Clevis to ISO 8140 (CETOP RP102P)

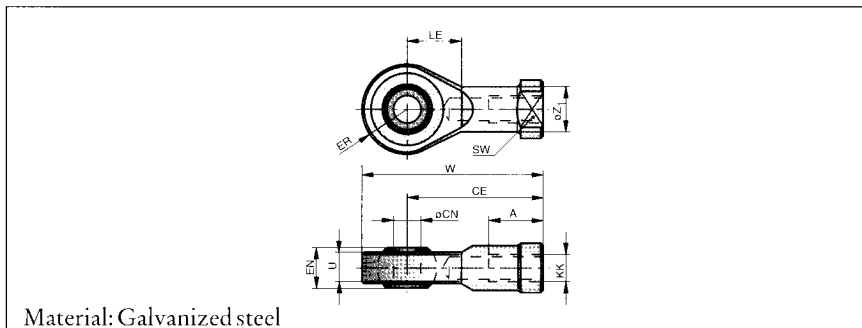


Material: Galvanized steel

Order Instructions, Dimension Table (mm), Weight

Order Instructions Type	Order No.	Cyl.Ø	ØCK	CE	CL	CM	KK	LE	W	Weight (kg)
GK-M10x1,25	KY 6135	32	10	40	20	10	M10x1,25	20	52	0,08
GK-M12x1,25	KY 6136	40	12	48	24	12	M12x1,25	24	62	0,125
GK-M16x1,5	KY 6139	50,63	16	64	32	16	M16x1,5	32	83	0,30
GK-M20x1,5	KY 6141	80,100	20	80	40	20	M20x1,5	40	105	0,52

Piston Rod Eye to ISO 8139 (CETOP RP103 P)

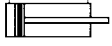
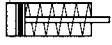



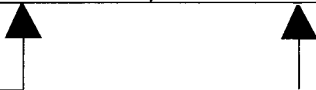
Material: Galvanized steel

Order Instructions, Dimension Table (mm), Weight

Order Instructions Type	Order No.	Cyl.-Ø	A	CE	ØCN	EN	ER	KK	LE	SW	U	W	ØZ ₁	Weight (kg)
GA-M10x1,25	KY 6147	32	20	43	10	14	14	M10x1,25	15	17	10,5	57	15	0,072
GA-M12x1,25	KY 6148	40	22	50	12	16	16	M12x1,25	17	19	12	66	17,5	0,107
GA-M16x1,5	KY 6150	50,63	28	64	16	21	21	M16x1,5	22	22	15	85	22	0,21
GA-M20x1,5	KY 6151	80,100	33	77	20	25	25	M20x1,5	26	32	18	102	27,5	0,38

Order Instructions for Basic Cylinder (Without Mounting)

Series	Symbol	Piston-Ø	Order Instructions	
			Type	Order-No.
Double acting without adjustable end cushioning, for contactless position sensing		32	NZK 6032/... NZK 6032/...-AG	PA 58390-.... PA 58470-....
		40	NZK 6040/... NZK 6040/...-AG	PA 59310-.... PA 59390-....
		50	NZK 6050/... NZK 6050/...-AG	PA 60390-.... PA 60470-....
		63	NZK 6063/... NZK 6063/...-AG	PA 61330-.... PA 61410-....
		80	NZK 6080/... NZK 6080/...-AG	PA 62230-.... PA 62310-....
		100	NZK 6100/... NZK 6100/...-AG	PA 63130-.... PA 63210-....
Single acting, normally retracted, without adjustable end cushioning for contactless position sensing		32	NZK 7032/... NZK 7032/...-AG	PA 58400-.... PA 58480-....
		40	NZK 7040/... NZK 7040/...-AG	PA 59320-.... PA 59400-....
		50	NZK 7050/... NZK 7050/...-AG	PA 60400-.... PA 60480-....
		63	NZK 7063/... NZK 7063/...-AG	PA 61340-.... PA 61420-....
		80	NZK 7080/... NZK 7080/...-AG	PA 62240-.... PA 62320-....
		100	NZK 7100/... NZK 7100/...-AG	PA 63140-.... PA 63220-....
Single acting, normally extended, without adjustable end cushioning for contactless position sensing		32	NZK 8032/... NZK 8032/...-AG	PA 58460-.... PA 58490-....
		40	NZK 8040/... NZK 8040/...-AG	PA 59360-.... PA 59410-....
		50	NZK 8050/... NZK 8050/...-AG	PA 60460-.... PA 60490-....
		63	NZK 8063/... NZK 8063/...-AG	PA 61400-.... PA 61430-....
		80	NZK 8080/... NZK 8080/...-AG	PA 62300-.... PA 62330-....
		100	NZK 8100/... NZK 8100/...-AG	PA 63200-.... PA 63230-....



Complete type designation and order no. with stroke length in mm (4- digits)

Standard stroke length:
 Double acting Version: -0005, 0010, 0025, 0050, 0080, 0100, 0125, 0160, 0200, 0250, 0320, 0400, 0500
 Single acting Version: -0005, 0010, 0015, 0020, 0025

Order Instructions for Cylinder Mountings

Description	Order No.					
	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100
Foot mounting A-..	PD 27917	PD 27918	PD 28072	PD 28073	PD 28074	PD 28075
Rear trunnion mounting B-..	PD 22704	PD 22705	PD 22706	PD 22707	PD 22708	PD 22709
Rear trunnion mounting BA-..	PD 23412	PD 23413	PD 23414	PD 23415	PD 23416	PD 23417
Rear trunnion mounting BAS-..*	PD 23843	PD 23844	PD 23845	PD 23846	PD 23847	PD 23848
Front flange mounting C-..	PD 23403	PD 23404	PD 23405	PD 23406	PD 23407	PD 23408
Rear flange mounting D-..	PD 23403	PD 23404	PD 23405	PD 23406	PD 23407	PD 23408
Security bolt for mountings B, BA, BAS	KY 6153	KY 6154	KY 6157	KY 6156	KY 6158	KY 6159

Delivery information: on delivery all cylinder mountings, except the trunnion mounting are not assembled

Ordering Example: Basic Cylinder: NZK 6032/100 PA 58390-0100 Foot Mounting: A-32 PD 27917

*with spherical bearing