

# AHP - Normzylinder

AHP - Standardized cylinder ■

AHP - Vérins standard ■



**MERKLE**<sup>®</sup>  
HYDRAULIK & PNEUMATIK

# Wir bringen Qualität in Umlauf

■ We set quality in motion

■ Nous faisons avancer la qualité

## Blockzylinder mit langem Hub

■ Block cylinder with long stroke

■ Vérins blocs - course longue

## Blockzylinder

■ Block cylinder

■ Vérins blocs

## Standardzylinder

■ Standard cylinder

■ Vérins standard

## Normzylinder

■ Standardized cylinder

■ Vérins standard

## Kernzugeinheit

■ Core pull unit

■ Unité de traction de noyaux

## Drehantrieb

■ Rotating drive unit

■ Transmission de rotation

## Schiebereinheit

■ Push unit

■ Unité de translation



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# Informationen und Hinweise

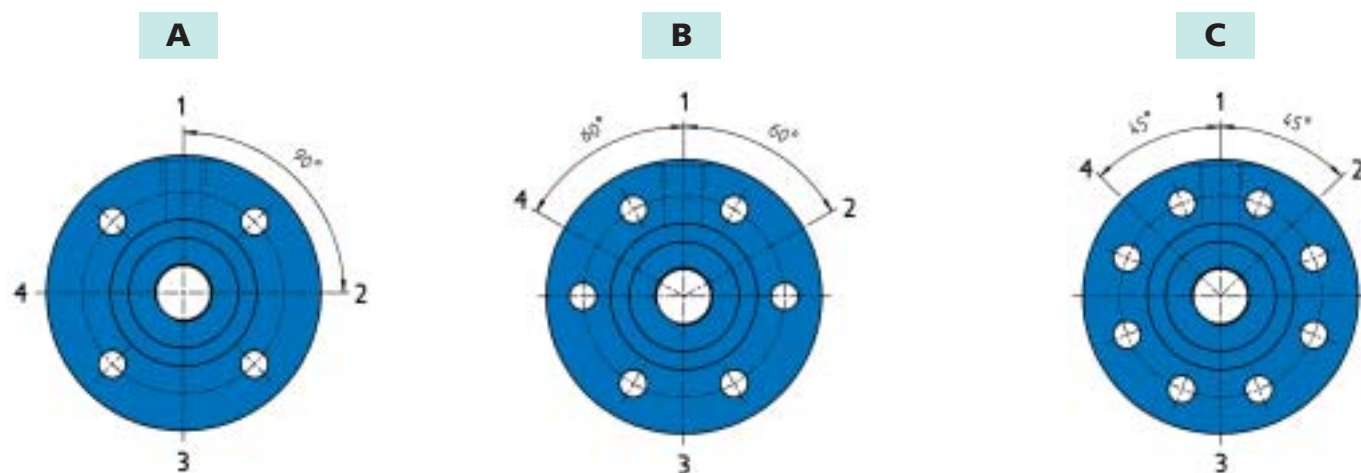
Information and references

Informations et conseils

**Einbaumaße nach DIN ISO** ■ Mounting dimensions to DIN ISO ■ Cotes de montage conformes DIN ISO

Typ ■ Type ■ Type	Norm ■ Standard ■ Norme
<b>DHZ 160</b>	DIN ISO 6020/1
<b>DHZ 250</b>	ISO 6022, DIN 24333

**Lage der Anschlüsse** ■ Position of connections ■ Position des attaches



- |   |  |   |   |
|---|--|---|---|
| <b>1 Hydraulikanschluss</b><br>■ Hydraulics connection<br>■ Raccords hydrauliques | <b>2 Regulierschraube</b><br>■ Adjusting screw<br>■ Vis de réglage | <b>3 Entlüftungsschraube</b><br>■ Venting screw<br>■ Vis de purge | <b>4 Rückschlagventil</b><br>■ Check valve<br>■ Clapet antiretour |
|---|--|---|---|

Typ ■ Type ■ Type	Kolben Ø ■ Piston Ø ■ Ø Piston		
	A	B	C
<b>DHZ 160</b>	25 – 40	50 – 160	– 200
<b>DHZ 250</b>		50 – 140	160 – 200

**Funktionsarten** ■ Operation modes ■ Modes de fonctionnement

Funktionsart ■ Operation mode ■ Mode de fonctionnement	Beschreibung ■ Description ■ Description
 A B	<b>201</b> <b>doppeltwirkend</b> ■ double-acting ■ à double effet
 A B	<b>204</b> <b>doppeltwirkend, Endlagendämpfung beidseitig</b> ■ double-acting, end of stroke cushioning, both sides ■ à double effet, amortissement de fin de course, deux côtés regelbar ■ controllable ■ réglable
 A B	<b>206</b> <b>doppeltwirkend, Endlagendämpfung vorn</b> ■ double-acting, end of stroke cushioning, front ■ à double effet, amortissement de fin de course, avant regelbar ■ controllable ■ réglable
 A B	<b>208</b> <b>doppeltwirkend, Endlagendämpfung hinten</b> ■ double-acting, end of stroke cushioning, back ■ à double effet, amortissement de fin de course, arrière regelbar ■ controllable ■ réglable







## Sonderausführungen ■ Special design features ■ Exécutions spéciales







<b>E</b>	<b>Entlüftung</b> <span style="color: #00A651;">■</span> Deaeration <span style="color: #4F81BD;">■</span> Purge de l'air	<b>Beidseitig</b> <span style="color: #00A651;">■</span> On both sides <span style="color: #4F81BD;">■</span> Deux côtés
<b>W1</b>	<b>DNC behandelt</b> <span style="color: #00A651;">■</span> DNC treatment <span style="color: #4F81BD;">■</span> Traitement DNC	<b>In korrosionsbeständiger Ausführung</b> <span style="color: #00A651;">■</span> Corrosion-proof design <span style="color: #4F81BD;">■</span> Exécution résistante à la corrosion
<b>DV</b>	<b>Dichtungsvariante</b> <span style="color: #00A651;">■</span> Sealing alternatives <span style="color: #4F81BD;">■</span> Variantes de joints	<b>Werkstoff: Viton (HFD-Flüssigkeiten) oder Temperaturbereich bis 180° C</b> <span style="color: #00A651;">■</span> Material: Viton (HDF-fluids) or temperatures up to 180° C <span style="color: #4F81BD;">■</span> Matériau: Viton (fluides HDF) ou températures jusqu'à 180° C
	<b>Dichtungsvariante</b> <span style="color: #00A651;">■</span> Sealing alternatives <span style="color: #4F81BD;">■</span> Variantes de joints	<b>Standardmäßig sind die DHZ-Zylinder mit Manschettendichtung ausgestattet. Andere Dichtvarianten auf Anfrage.</b> <span style="color: #00A651;">■</span> As standard, the DHZ cylinders are equipped with cup packing. Other sealing variants on request. <span style="color: #4F81BD;">■</span> Les vérins DHZ standard sont équipés de joints à manchettes. Autres variantes de joints sur demande.
	<b>Näherungsschalter</b> <span style="color: #00A651;">■</span> Proximity switch <span style="color: #4F81BD;">■</span> Détecteur de proximité	<b>Alle DHZ-Zylinder können mit Endlagenabfrage ausgeführt werden</b> <span style="color: #00A651;">■</span> All DHZ cylinders can be equipped with limit position scanning. <span style="color: #4F81BD;">■</span> Tous les vérins DHZ peuvent être équipés de capteurs fin de course.
	<b>Sonderausführung</b> <span style="color: #00A651;">■</span> Special model <span style="color: #4F81BD;">■</span> Exécution spéciale	<b>Weitere Sonderausführungen auf Anfrage</b> <span style="color: #00A651;">■</span> Other special versions on request <span style="color: #4F81BD;">■</span> Autres exécutions spéciales sur demande

Die Bezeichnung für die Sonderausführung wird bei Bestellung an dem Bestelltext angefügt

- On ordering, the designation of the special version is appended to the order text.
- Les spécifications des exécutions spéciales doivent être indiquées dans les descriptifs de commande.

## Befestigungsarten ■ mounting systems ■ modes de fixation

Befestigungsart <span style="color: #00A651;">■</span> Mounting mode <span style="color: #4F81BD;">■</span> Mode de fixation	Beschreibung <span style="color: #00A651;">■</span> Description <span style="color: #4F81BD;">■</span> Description	Seite <span style="color: #00A651;">■</span> Page	
		DHZ 160	DHZ 250
	<b>Standardausführung</b> <span style="color: #00A651;">■</span> Standard version <span style="color: #4F81BD;">■</span> Exécution standard	<b>6</b>	<b>12</b>
	<b>Gewindebefestigung (vorne), Innengewinde</b> <span style="color: #00A651;">■</span> Thread fixing (at front), internal thread <span style="color: #4F81BD;">■</span> Fixation fileté (avant), filetage intérieur	<b>6</b>	
	<b>Rechteckflansch (vorne)</b> <span style="color: #00A651;">■</span> Square flange (at front) <span style="color: #4F81BD;">■</span> Flaque carré (avant)	<b>8</b>	
	<b>Fußbefestigung</b> <span style="color: #00A651;">■</span> Foot attachment <span style="color: #4F81BD;">■</span> Fixation sur pieds		<b>12</b>
	<b>Rechteckflansch (hinten)</b> <span style="color: #00A651;">■</span> Square flange (at rear) <span style="color: #4F81BD;">■</span> Flaque carré (arrière)	<b>8</b>	
	<b>Schwenkaugenbefestigung mit Buchse</b> <span style="color: #00A651;">■</span> Swivel eyelet fixing with socket <span style="color: #4F81BD;">■</span> Fixation type oeil pivotant avec manchon	<b>7</b>	<b>14</b>

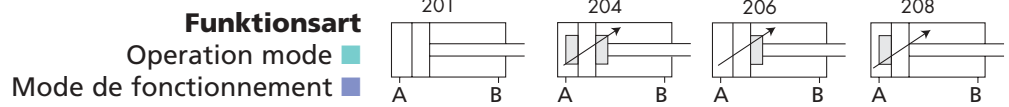
Befestigungsart <span style="color: #00A651;">■</span> Mounting mode <span style="color: #4F81BD;">■</span> Mode de fixation	Beschreibung <span style="color: #00A651;">■</span> Description <span style="color: #4F81BD;">■</span> Description	Seite <span style="color: #00A651;">■</span> Page	
		DHZ 160	DHZ 250
	<b>Schwenkaugenbefestigung mit Kugelgelenk, seitlicher Schwenkbereich ± 8°</b> <span style="color: #00A651;">■</span> Swivel eyelet fixing with ball hinge, side swivel range ± 8° <span style="color: #4F81BD;">■</span> Fixation type oeil pivotant avec articulation à rotule, plage de pivotement latéral ± 8°	<b>7</b>	<b>14</b>
	<b>Schwenkzapfen (vorne)</b> <span style="color: #00A651;">■</span> Swivel pin (at front) <span style="color: #4F81BD;">■</span> Pivot (avant)	<b>10</b>	
	<b>Schwenkzapfen (mittig)</b> <span style="color: #00A651;">■</span> Swivel pin (at center) <span style="color: #4F81BD;">■</span> Pivot (médian)	<b>10</b>	<b>15</b>
	<b>Schwenkzapfen (hinten)</b> <span style="color: #00A651;">■</span> Swivel pin (at rear) <span style="color: #4F81BD;">■</span> Pivot (arrière)	<b>11</b>	
	<b>Rundflansch (vorne)</b> <span style="color: #00A651;">■</span> Round flange (at front) <span style="color: #4F81BD;">■</span> Flaque circulaire (avant)	<b>9</b>	<b>13</b>
	<b>Rundflansch (hinten)</b> <span style="color: #00A651;">■</span> Round flange (at rear) <span style="color: #4F81BD;">■</span> Flaque circulaire (arrière)	<b>9</b>	<b>13</b>



# Normzylinder DHZ 160 – 00/001/07/08

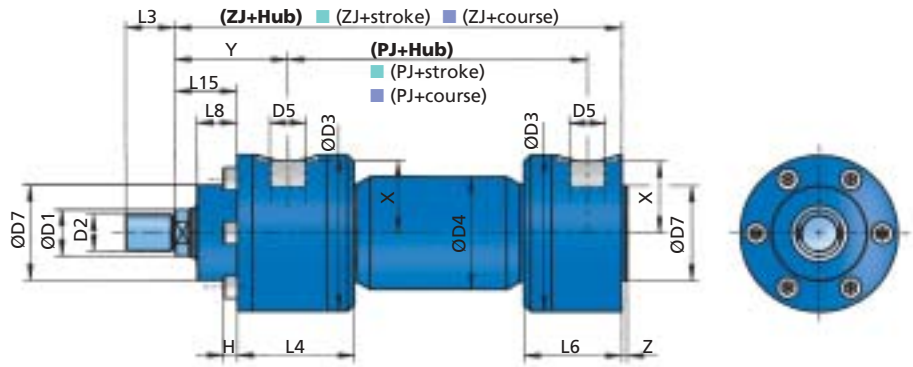
Standardized cylinder DHZ 160 – 00/001/07/08

Vérins standard DHZ 160 – 00/001/07/08



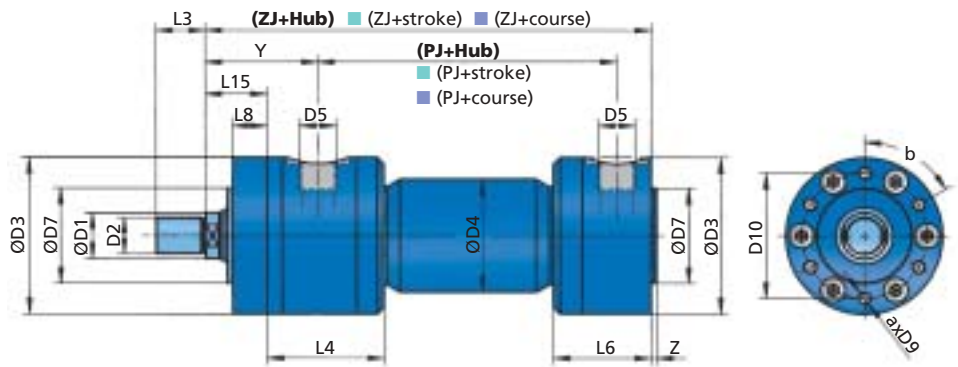
## Befestigungsart 00

- Mounting mode 00
- Mode de fixation 00



## Befestigungsart 001

- Mounting mode 001
- Mode de fixation 001



**Bestellbezeichnung (Beispiel)** Order specification (example) Référence de commande (exemple)

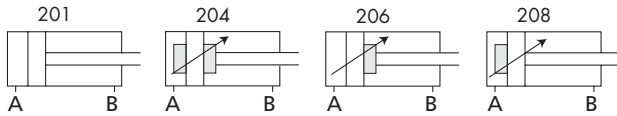
**DHZ 160 . 80 / 45 . 100 . 00 . 201**

Typ Type	Kolben Ø Piston Ø	Stangen Ø (D1) Rod Ø (D1)	Hub Stroke	Befestigungsart Mounting mode	Funktionsart Operation mode	D2	D3	D4	D5	D7 <sub>rs</sub>	a	D9	D10	D11 <sup>H7</sup>	ZJ	XD
						Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
nach Kundenwunsch According to customer specification Selon spécification client	DHZ 160	25	14	00/001/07/08	201/204/206/208	M12x1,25	58	35	G 1/4"	32	4	M6	46	12	150	178
						M14x1,5										
						M16x1,5										
						M20x1,5										
						M27x2										
						M33x2										
						M42x2										
						M48x2										
						M56x2										
						M64x3										
						M72x3										
						M80x3										
						M80x3										
						M100x3										
						M100x3										

Maßänderungen vorbehalten Subject to change without notice Sous réserve de modifications

Maße in mm Dimensions in mm Dimensions en mm

**Nenndruck 160 bar (2300 PSI), statisch**  
 ■ Nominal pressure 160 bar (2300 PSI), static  
 ■ Pression nominale 160 bar (2300 PSI), statique

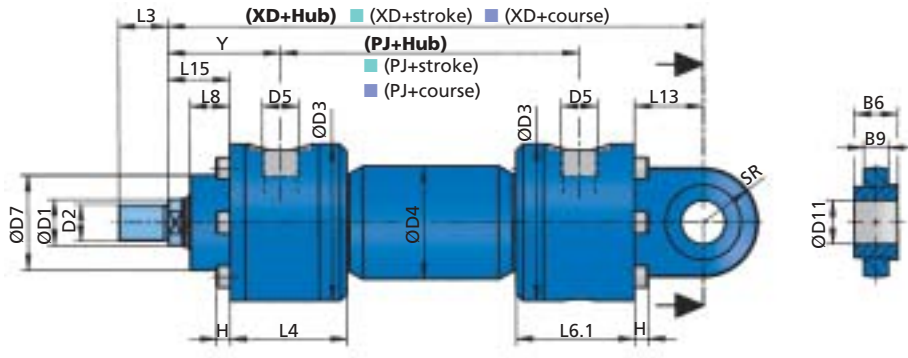


**Funktionsart**

- Operation mode
- Mode de fonctionnement

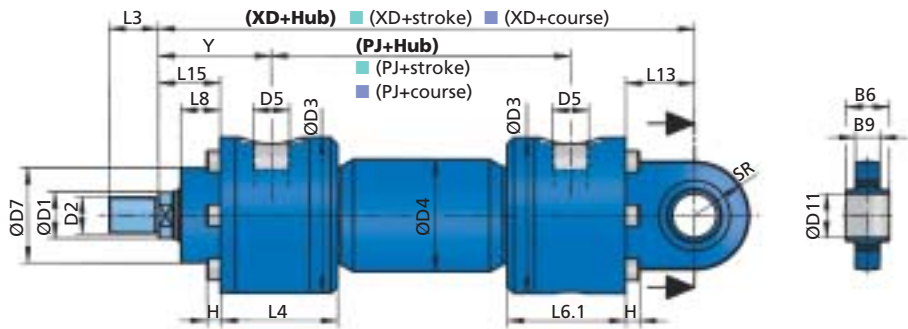
**Befestigungsart 07**

- Mounting mode 07
  - Mode de fixation 07
- (MP3)**



**Befestigungsart 08**

- Mounting mode 08
  - Mode de fixation 08
- (MP5)**

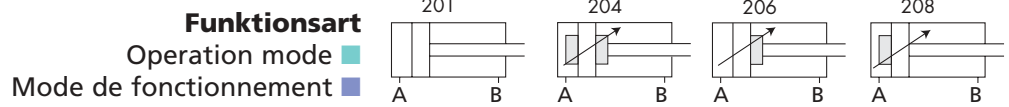


X±0,1	b	Y	PJ	L3	L4	L6	L6.1	L8	L8.1	L13	L15	B6	B9	H	Z	SR
26	90	58	77	16 18	67	52	58	15	12	22	28	12	7	6	3	16
30	90	64	89	18 22	72	57	68	19	16	26	32	16	9	6	3	20
39,5	90	71	97	22 28	85	69	77	19	16	33	32	20	12	8	3	25
45	60	72	111	28 36	83	71	83	24	20	40	38	25	16	8	4	31
53	60	82	117	36 45	84	71	86	29	25	50	45	32	18	10	4	40
62	60	91	134	45 56	113	101	100	36	32	72	54	40	22	12	4	50
75,5	60	108	162	56 63	138	117	-	37	32	80	57	50	28	14	5	63
92,5	60	121	174	63 85	175	144	-	37	32	190	60	63	36	16	5	71
99	60	130	195	75	170	140	-	40	35	110	65	70	40	16	5	85
115,5	60	143	191	85 95	190	149	-	41	36	115	66	80	45	20	5	90
130	60	160	224	90	205	161	-	45	40	135	75	90	50	20	5	100
144	60	190	224	95 112	195	136	-	45	40	135	75	100	55	20	5	112

# Normzylinder DHZ 160 – 02/05/22/55

Standardized cylinder DHZ 160 – 02/05/22/55

Vérins standard DHZ 160 – 02/05/22/55

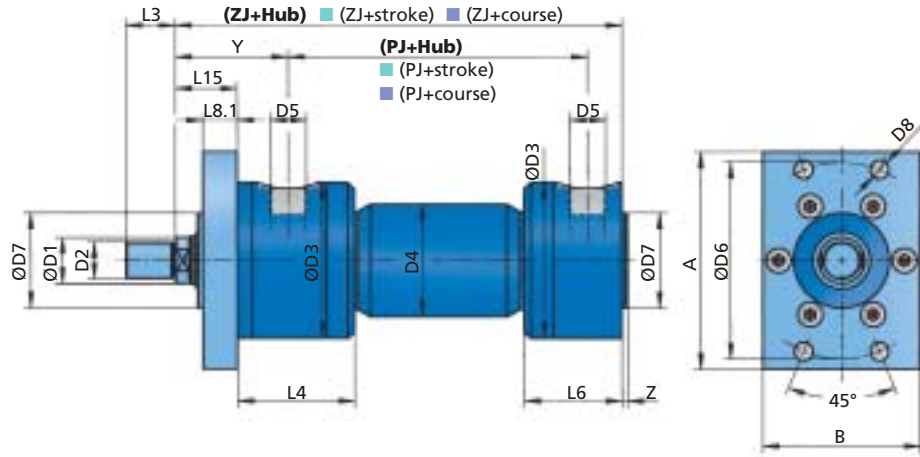


## Befestigungsart 02

Mounting mode 02

Mode de fixation 02

(MF1)

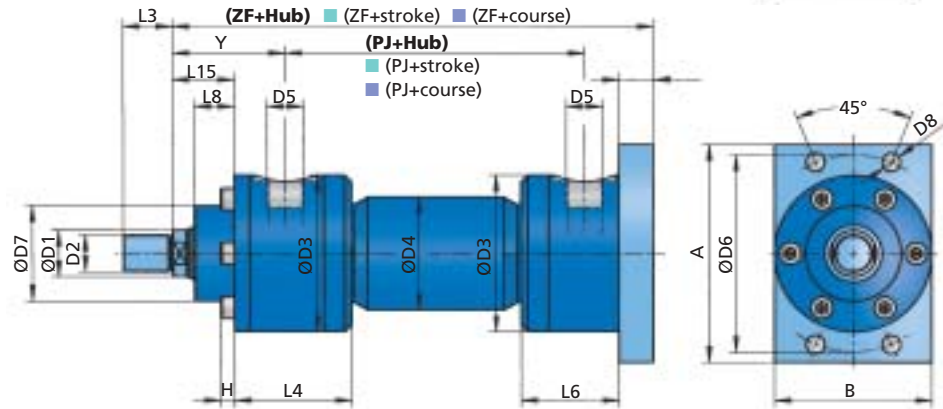


## Befestigungsart 05

Mounting mode 05

Mode de fixation 05

(MF2)



Bestellbezeichnung (Beispiel) Order specification (example) Référence de commande (exemple)

DHZ 160 . 80 / 45 . 100 . 02 . 201

Typ Type	Kolben Ø Piston Ø	Stangen Ø (D1) Rod Ø (D1)	Hub Stroke	Befestigungsart Mounting mode	Funktionsart Operation mode	D2	D3	D4	D5	D6 <sup>15-13</sup>	D7 <sup>18</sup>	D8	D8.1	D12	
						Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
DHZ 160	25	14	18	nach Kundenwunsch According to customer specification Selon spécification client	02/22/05/55	201/204/206/208	M12x1,25	58	35	G 1/4"	75	32	6,6	6,6	90
DHZ 160	32	18	22				M14x1,5	66	45	G 3/8"	92	40	9	9	110
DHZ 160	40	22	28				M16x1,5	85	55	G 1/2"	106	50	9	9	125
DHZ 160	50	28	36				M20x1,5	95	65	G 1/2"	126	60	11	11	148
DHZ 160	63	36	45				M27x2	115	83	G 3/4"	145	70	13,5	13,5	170
DHZ 160	80	45	56				M33x2	132	100	G 3/4"	165	85	17,5	17,5	195
DHZ 160	100	56	70				M42x2	158	125	G 1"	200	106	22	22	235
DHZ 160	125	70	90				M48x2	194	160	G 1 1/4"	235	132	22	22	270
DHZ 160	140	80	90				M48x2	206	170	G 1 1/4"	260	145	-	22	296
DHZ 160	160	90	110				M64x3	238	190	G 1 1/4"	280	160	-	22	320
DHZ 160	180	100	110				M80x3	268	210	G 1 1/4"	320	185	-	26	365
DHZ 160	200	110	140				M100x3	294	244	G 1 1/4"	340	200	-	26	385

Maßänderungen vorbehalten Subject to change without notice Sous réserve de modifications

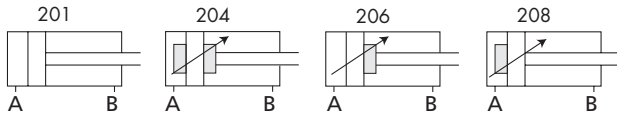
Maße in mm Dimensions in mm Dimensions en mm



**Nenndruck 160 bar (2300 PSI), statisch**

■ Nominal pressure 160 bar (2300 PSI), static

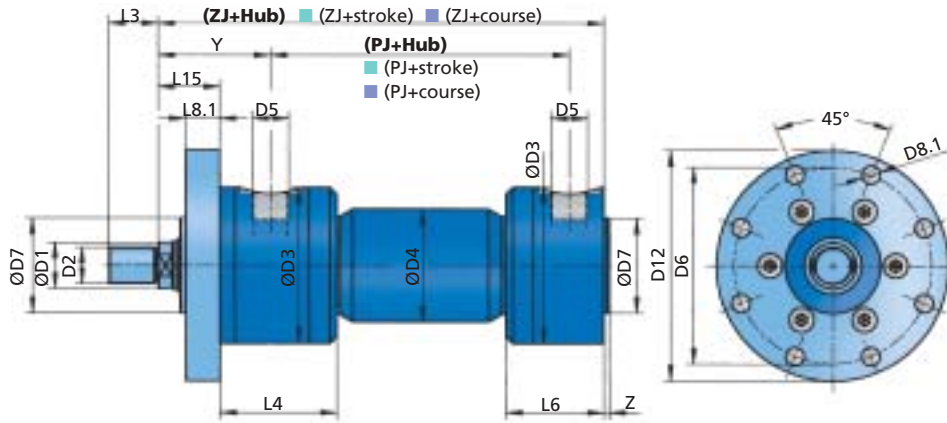
■ Pression nominale 160 bar (2300 PSI), statique



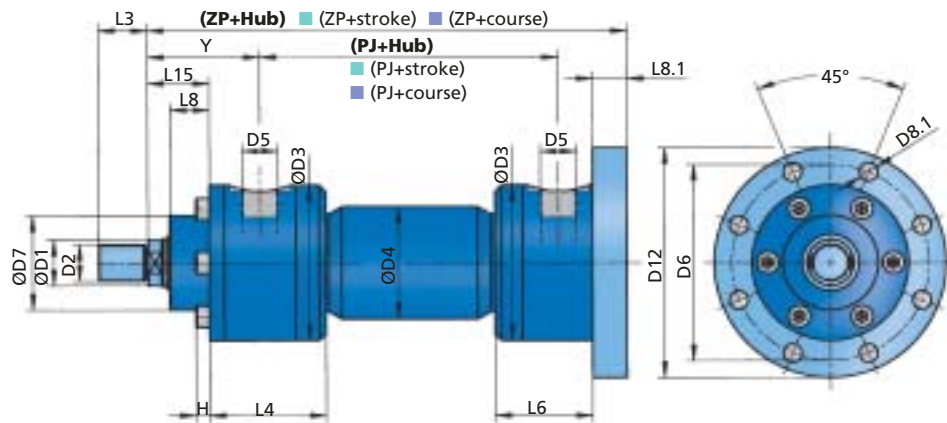
**Funktionsart**

■ Operation mode

■ Mode de fonctionnement



**Befestigungsart 22**  
Mounting mode 22 ■  
Mode de fixation 22 ■  
**(MF3)**



**Befestigungsart 55**  
Mounting mode 55 ■  
Mode de fixation 55 ■  
**(MF4)**

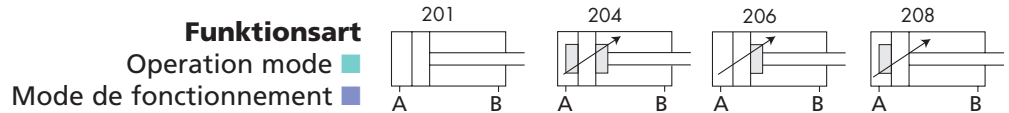


ZJ	ZF	ZP	Y	PJ	L3	L4	L6	L8	L8.1	L15	A	B	H	Z
150	162	162	58	77	16 18	67	52	15	12	28	85	58	6	3
170	186	186	64	89	18 22	72	57	19	16	32	105	66	6	3
190	206	206	71	97	22 28	85	69	19	16	32	115	85	8	3
205	225	225	72	111	28 36	83	71	24	20	38	140	95	8	4
224	249	249	82	117	36 45	84	71	29	25	45	160	115	10	4
250	282	282	91	134	45 56	113	101	36	32	54	185	132	12	4
300	332	332	108	162	56 63	138	117	37	32	57	225	158	14	5
325	357	357	121	174	63 85	175	144	37	32	60	255	195	16	5
360	-	395	130	195	75	170	140	40	35	65	-	-	16	5
370	-	406	143	191	85 95	190	149	41	36	66	-	-	20	5
425	-	465	160	224	90	205	161	45	40	75	-	-	20	5
450	-	490	190	224	95 112	195	136	45	40	75	-	-	20	5

# Normzylinder DHZ 160 – 10/11/12

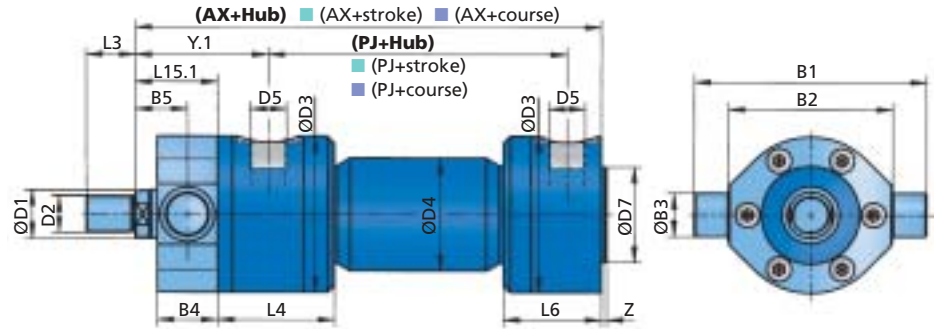
Standardized cylinder DHZ 160 – 10/11/12

Vérins standard DHZ 160 – 10/11/12



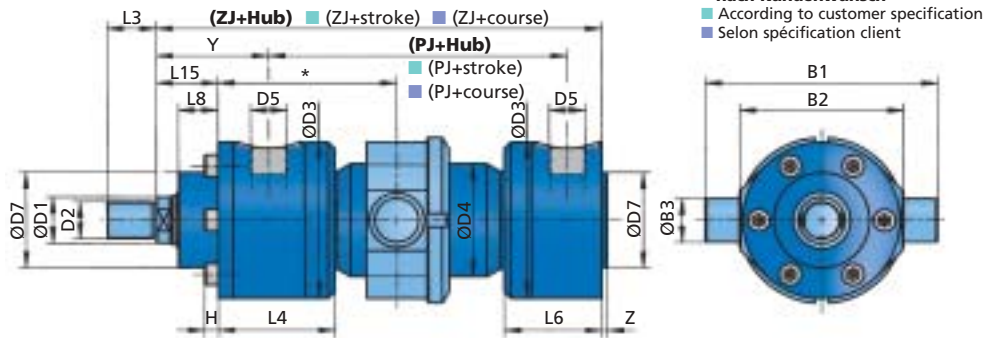
## Befestigungsart 10

- Mounting mode 10
- Mode de fixation 10



## Befestigungsart 11

- Mounting mode 11
- Mode de fixation 11 (MT4)



**Bestellbezeichnung (Beispiel)** Order specification (example) Référence de commande (exemple)

DHZ 160 . 80 / 45 . 100 . 10 . 201

Typ Type	Kolben Ø Piston Ø	Stangen Ø (D1) Rod Ø (D1)	Hub Stroke	Befestigungsart Mounting mode	Funktionsart Operation mode	D2	D3	D4	D5	D7 <sub>f8</sub>	ZJ	XJ	AX	Y
						Type	Type	Type	Type	Type	Type	Type	Type	Type
DHZ 160	25	14	nach Kundenwunsch According to customer specification Selon spécification client	10/11/12	201 / 204 / 206 / 208	M12x1,25	58	35	G 1/4"	32	150	160	155	58
DHZ 160	32	18				M14x1,5			G 3/8"					
DHZ 160	40	22				M16x1,5	G 1/2"	50	190	205	201	71		
DHZ 160	50	28				M20x1,5	G 1/2"	60	205	222,5	216	72		
DHZ 160	63	36				M27x2	G 3/4"	70	224	246	239	82		
DHZ 160	80	45				M33x2	G 3/4"	85	250	276	266	91		
DHZ 160	100	56				M42x2	G 1"	106	300	332	327	108		
DHZ 160	125	70				M48x2	G 1 1/4"	132	325	363,5	365	121		
DHZ 160	140	80				M48x2	G 1 1/4"	145	360	408	416	130		
DHZ 160	160	90				M64x3	G 1 1/4"	160	370	418	425	143		
DHZ 160	180	100				M80x3	G 1 1/4"	185	425	-	486	160		
DHZ 160	200	110				M72x3	G 1 1/4"	200	450	508	521	190		
		140				M100x3								

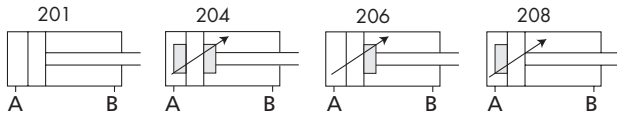
Maßänderungen vorbehalten Subject to change without notice Sous réserve de modifications

Maße in mm Dimensions in mm Dimensions en mm

**Nenndruck 160 bar (2300 PSI), statisch**

■ Nominal pressure 160 bar (2300 PSI), static

■ Pression nominale 160 bar (2300 PSI), statique



**Funktionsart**

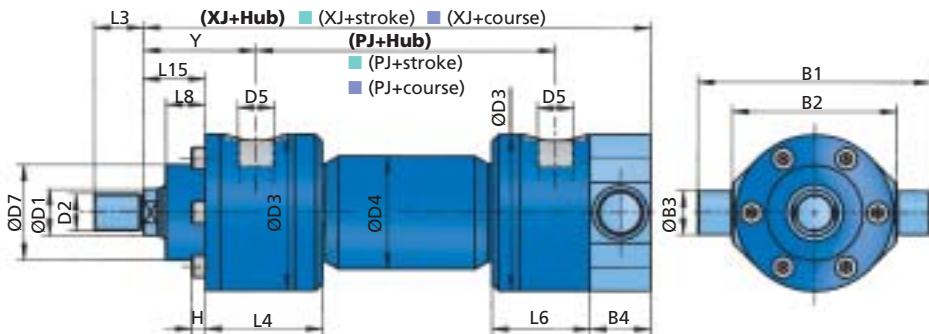
■ Operation mode

■ Mode de fonctionnement

**Befestigungsart 12**

■ Mounting mode 12

■ Mode de fixation 12

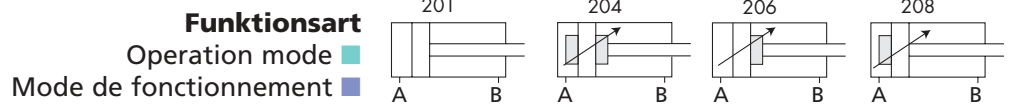


Y.1	PJ	L3	L4	L6	L8	L15	L15.1	B1	B2	B3 <sub>rs</sub>	B4	B5	H	Z
63	77	16 18	67	52	15	28	33	83	63	12	20	23	6	3
69	89	18 22	72	57	19	32	37	99	75	16	24	25	6	3
82	97	22 28	85	69	19	32	43	122	90	20	30	28	8	3
83	111	28 36	83	71	24	38	49	145	105	25	35	31,5	8	4
97	117	36 45	84	71	29	45	60	170	120	32	44	38	10	4
107	134	45 56	113	101	36	54	70	199	135	40	52	44	12	4
135	162	56 63	138	117	37	57	84	240	160	50	64	52	14	5
161	174	63 85	175	144	37	60	100	295	195	63	77	61,5	16	5
186	195	75	170	140	40	65	121	332	220	70	96	73	16	5
198	191	85 95	190	149	41	66	121	366	240	80	96	73	20	5
221	224	90	205	161	45	75	136	415	275	90	106	98	20	5
261	224	95 112	195	136	45	75	146	455	295	100	116	88	20	5

# Normzylinder DHZ 250 – 00/04/22/55

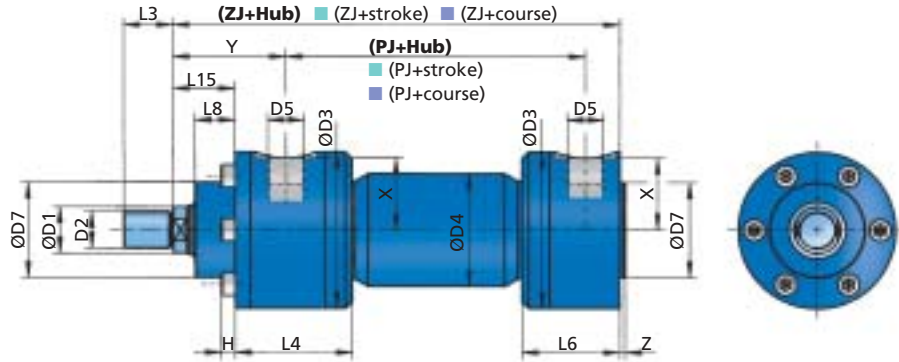
Standardized cylinder DHZ 250 – 00/04/22/55

Vérins standard DHZ 250 – 00/04/22/55



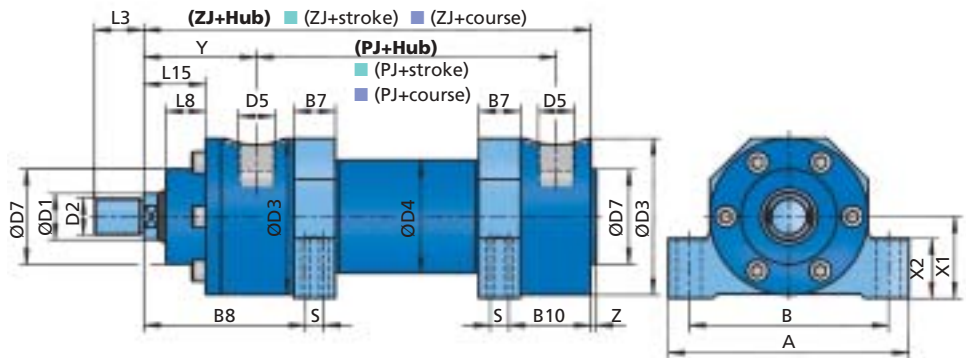
## Befestigungsart 00

- Mounting mode 00
- Mode de fixation 00



## Befestigungsart 04

- Mounting mode 04
- Mode de fixation 04 (MS2)



**Bestellbezeichnung (Beispiel)** Order specification (example) Référence de commande (exemple)

D H Z 2 5 0 . 8 0 / 5 0 . 1 0 0 . 0 0 . 2 0 1

Type Type	Kolben Ø Piston Ø Ø Piston	Stangen Ø (D1) Rod Ø (D1) Ø Tige (D1)	Hub Stroke Course	Befestigungsart Mounting mode Mode de fixation	Funktionsart Operation mode Mode de fonctionnement	D2	D3	D4	D5	D6 <sup>1,3</sup>	D7 <sub>re</sub>	D8.1	D12	ZJ
						Type	Type	Type	Type	Type	Type	Type	Type	Type
DHZ 250	50	32 36	nach Kundenwunsch According to customer specification Selon spécification client	00/04/22/55	201/204/206/208	M27x2	105	65	M22x1,5 G 1/2"	132	63	14	155	240
DHZ 250	63	40 45				M33x2	122	83	M27x2 G 3/4"	150	75	14	175	270
DHZ 250	80	50 56				M42x2	145	105	M27x2 G 3/4"	180	90	18	210	300
DHZ 250	100	63 70				M48x2	170	130	M33x2 G 1"	212	110	22	250	335
DHZ 250	125	80 90				M64x3	208	160	M33x2 G 1"	250	132	22	290	390
DHZ 250	140	90				M72x3	226	176	M42x2 G 1 1/4"	285	145	26	328	421
DHZ 250	160	100 110				M80x3	265	203	M42x2 G 1 1/4"	315	160	26	360	460
DHZ 250	180	110				M90x3	285	220	M42x2 G 1 1/4"	355	185	33	408	495
DHZ 250	200	125 140				M100x3	315	254	M42x2 G 1 1/4"	380	200	33	440	540

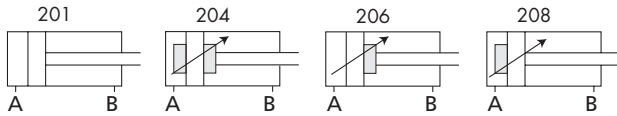
Maßänderungen vorbehalten Subject to change without notice Sous réserve de modifications

Maße in mm Dimensions in mm Dimensions en mm

**Nenndruck 250 bar (3600 PSI), statisch**

■ Nominal pressure 230 bar (3600 PSI), static

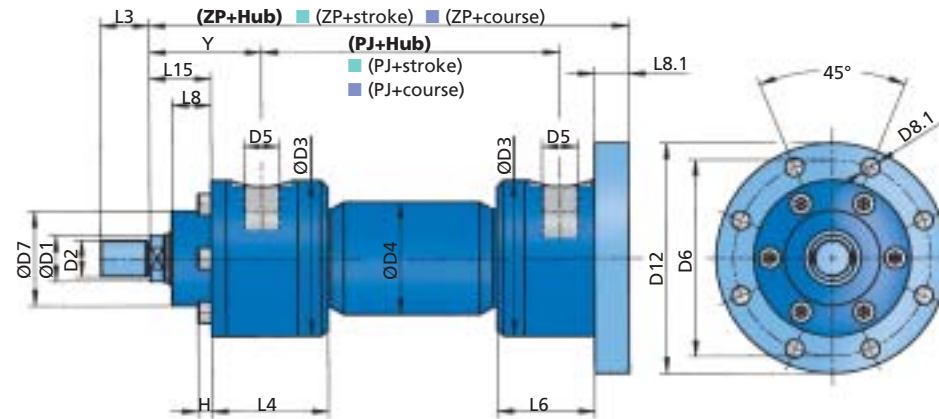
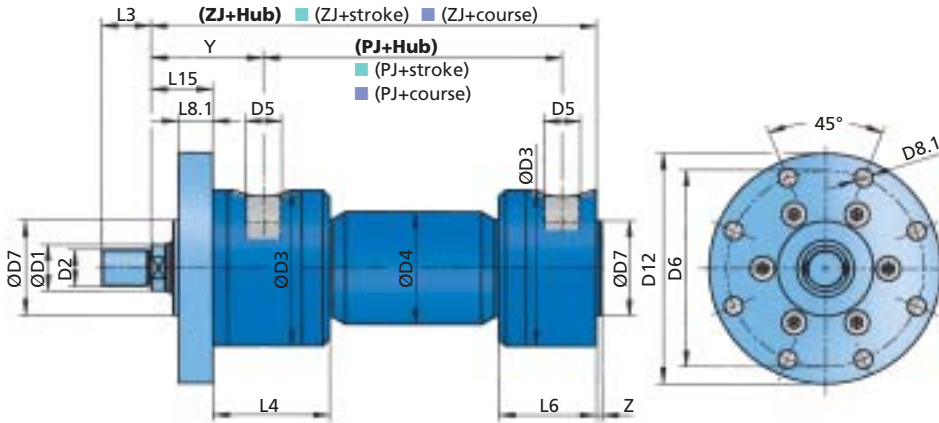
■ Pression nominale 230 bar (3600 PSI), statique



**Funktionsart**

■ Operation mode

■ Mode de fonctionnement



**Befestigungsart 22**

Mounting mode 22 ■

Mode de fixation 22 ■

(MF3)



**Befestigungsart 55**

Mounting mode 55 ■

Mode de fixation 55 ■

(MF4)



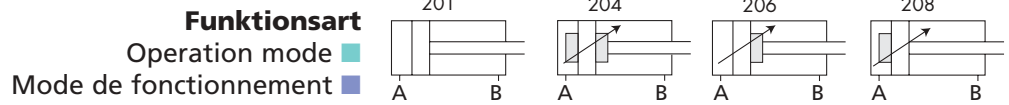
ZP	PJ	X±0,1	X1	X2	Y	L3	L4	L6	L8	L8.1	L15	H	Z	B7	B8	B10	S
265	121	38	55	38	97	36	106	78	29	25	47	10	4	28	138	63	-
298	122	48	65	48	111	45	117	86	32	28	53	12	4	30	155	71	-
332	145	55	75	55	125	56	141	106	36	32	60	16	4	50	176	81	-
371	164	60	90	60	141	63	183	140	41	36	68	16	5	78	211	100	-
430	184	100	115	100	166	85	205	155	45	40	76	20	5	84	239	113	-
461	214	105	130	105	171	90	216	157	45	40	76	20	5	84	250	115	-
505	236	110	145	110	179	95	219	170	50	45	85	24	5	84	262	128	-
545	250	115	160	115	205	105	275	205	55	50	95	27	5	124	275	110	66
596	264	120	175	120	221	112	289	224	61	56	101	30	5	128	291	125	70



# Normzylinder DHZ 250 – 07/08/11

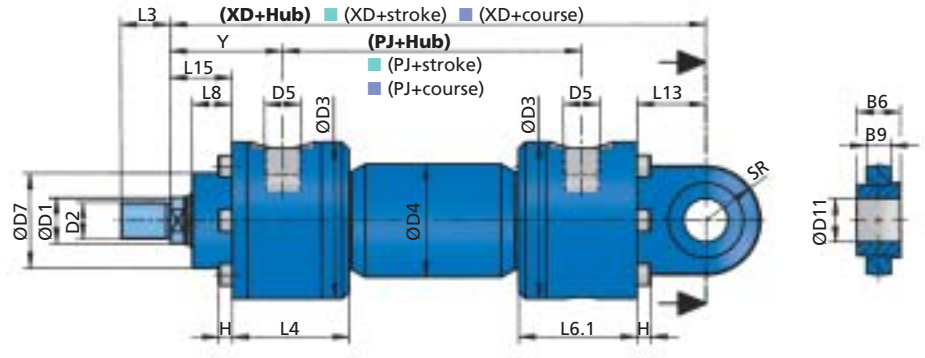
Standardized cylinder DHZ 250 – 07/08/11

Vérins standard DHZ 250 – 07/08/11



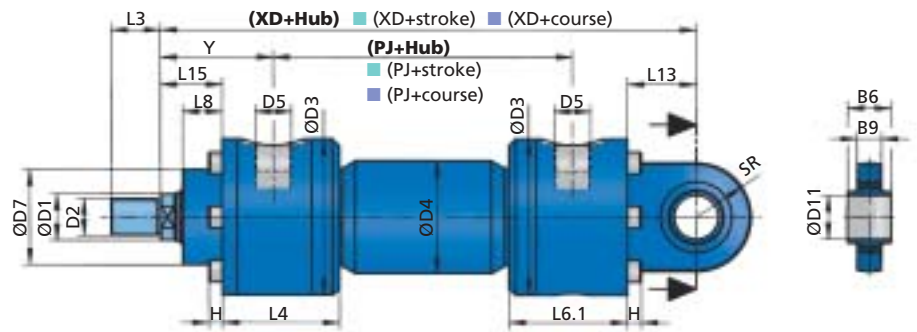
## Befestigungsart 07

- Mounting mode 07
  - Mode de fixation 07
- (MP3)



## Befestigungsart 08

- Mounting mode 08
  - Mode de fixation 08
- (MP5)



**Bestellbezeichnung (Beispiel)** Order specification (example) Référence de commande (exemple)

D H Z 2 5 0 . 8 0 / 5 0 . 1 0 0 . 0 7 . 2 0 1

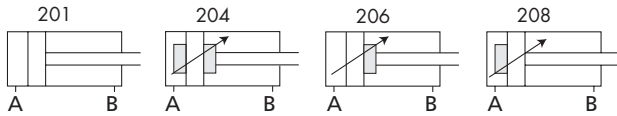
Type Type	Kolben Ø Piston Ø Ø Piston	Stangen Ø (D1) Rod Ø (D1) Ø Tige (D1)	Hub Stroke Course	Befestigungsart Mounting mode Mode de fixation	Funktionsart Operation mode Mode de fonctionnement	D2	D3	D4	D5	D7 <sub>fe</sub>	D11 <sup>H7</sup>	ZJ	XD	PJ
						Type	Type	Type	Type	Type	Type	Type	Type	Type
DHZ 250	50	32 36	nach Kundenwunsch According to customer specification Selon spécification client	07/08/11	201/204/206/208	M27x2	105	65	M22x1,5 G 1/2"	63	32	240	305	121
DHZ 250	63	40 45				M33x2	122	83	M27x2 G 3/4"	75	40	270	348	122
DHZ 250	80	50 56				M42x2	145	105	M27x2 G 3/4"	90	50	300	395	145
DHZ 250	100	63 70				M48x2	170	130	M33x2 G 1"	110	63	335	442	164
DHZ 250	125	80 90				M64x3	208	160	M33x2 G 1"	132	80	390	520	184
DHZ 250	140	90				M72x3	226	176	M42x2 G 1 1/4"	145	90	421	576	214
DHZ 250	160	100 110				M80x3	265	203	M42x2 G 1 1/4"	160	100	460	617	236
DHZ 250	180	110				M90x3	285	220	M42x2 G 1 1/4"	185	110	495	641	250
DHZ 250	200	125 140				M100x3	315	254	M42x2 G 1 1/4"	200	125	540	756	264

Maßänderungen vorbehalten Subject to change without notice Sous réserve de modifications

Maße in mm Dimensions in mm Dimensions en mm

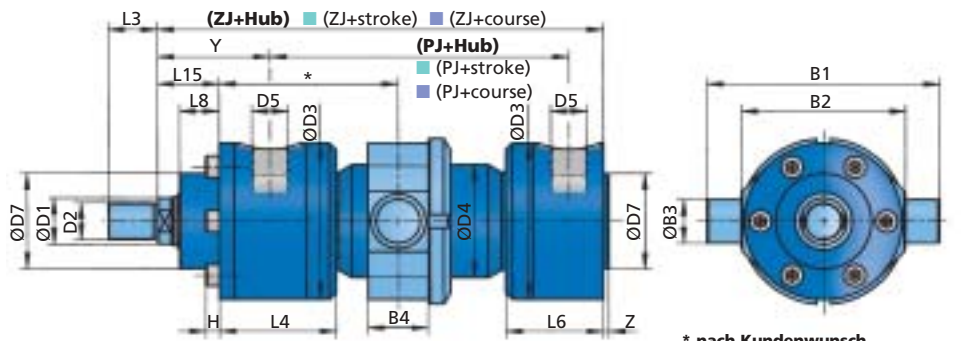
**Nenndruck 250 bar (3600 PSI), statisch**

- Nominal pressure 230 bar (3600 PSI), static
- Pression nominale 230 bar (3600 PSI), statique



**Funktionsart**

- Operation mode
- Mode de fonctionnement



\* nach Kundenwunsch  
 ■ According to customer specification  
 ■ Selon spécification client

**Befestigungsart 11**  
 Mounting mode 11 ■  
 Mode de fixation 11 ■  
**(MT4)**



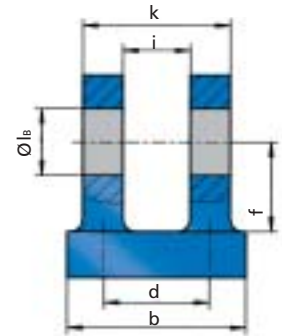
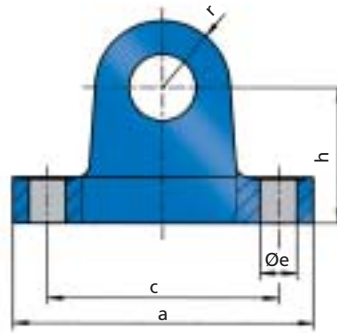
Y	L3	L4	L6	L6.1	L8	L13	L15	B1	B2	B3 <sub>fl</sub>	B4	B6	B9	SR	H	Z
97	36	106	78	83	29	65	47	162	112	32	42	32	18	40	10	4
111	45	117	86	86	32	78	53	189	125	40	52	40	22	50	12	4
125	56	141	106	100	36	95	60	230	150	50	62	50	28	63	16	4
141	63	183	140	-	41	107	68	280	180	63	76	63	36	70	16	5
166	85	205	155	-	45	130	76	350	224	80	96	80	45	90	20	5
171	90	216	157	-	45	155	76	380	240	90	108	90	50	100	20	5
179	95	219	170	-	50	157	85	440	280	100	118	100	55	112	24	5
205	105	275	205	-	55	191	95	485	305	110	128	110	55	135	27	5
221	112	289	224	-	61	216	101	535	335	125	146	125	70	160	30	5

# Lagerböcke

■ Bearing pedestals

■ Supports

## LB-CBA



### LB-CBA . 20

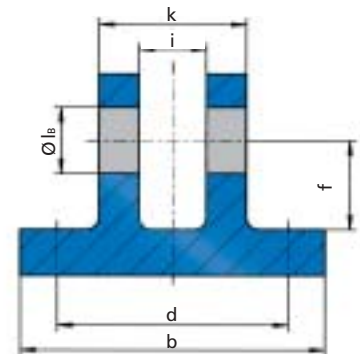
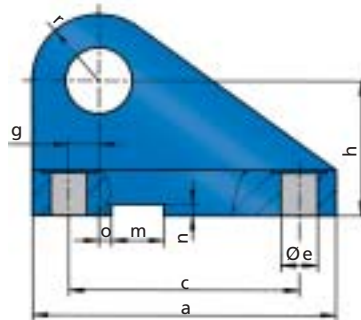
Nach ISO 8132 ■ According to ISO 8132 ■ Selon ISO 8132

Typ ■ Type ■ Type	I <sub>B</sub> <sup>H7</sup>	k	b	a	h	f	d	c	r	e	i	Nennkraft (KN)		Gewicht (kg)	
												■ Nominal power (KN)	■ Force nominale (KN)	■ Weight (kg)	■ Poids (kg)
LB-CBA-10	10	24	33	60	32	22	17	42	10	6.6	10	5	0.1		
LB-CBA-12	12	28	40	70	34	22	20	50	12	9	12	8	0.31		
LB-CBA-16	16	36	50	90	40	27	26	65	16	11	16	12.5	0.59		
LB-CBA-20	20	45	58	98	45	30	32	75	20	11	20	20	0.9		
LB-CBA-25	25	56	70	113	55	37	40	85	25	13.5	25	32	1.6		
LB-CBA-32	32	70	85	143	65	43	50	110	32	17.5	32	50	2.8		
LB-CBA-40	40	90	108	170	76	52	65	130	40	22	40	80	5.0		
LB-CBA-50	50	110	130	220	95	65	80	170	50	26	50	125	10.1		
LB-CBA-63	63	140	160	270	112	75	100	210	63	33	63	200	15.4		
LB-CBA-80	80	170	210	320	140	95	125	250	80	39	80	320	30.0		

Passende Bolzen BO-BA und BO-PP ■ Bolts to fit BO-BA and BO-PP ■ Axes spéciaux BO-BA et BO-PP

Maße in mm ■ Dimensions in mm ■ Dimensions en mm

## LB-CBB



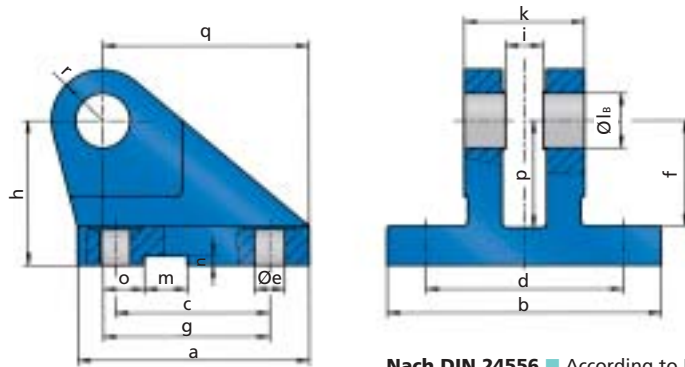
### LB-CBB . 20

Nach ISO 8132 ■ According to ISO 8132 ■ Selon ISO 8132

Typ ■ Type ■ Type	I <sub>B</sub> <sup>H7</sup>	k	m	b	a	h	f	d	c	g	o	r	e	i	n	Nennkraft (KN)		Gewicht (kg)	
																■ Nominal power (KN)	■ Force nominale (KN)	■ Weight (kg)	■ Poids (kg)
LB-CBB-10	10	24	8	56	60	32	22	39	44	2	10	10	6.6	10	3.3	5	0.31		
LB-CBB-12	12	28	10	72	65	34	22	52	45	2	10	12	9	12	3.3	8	0.55		
LB-CBB-16	16	36	16	90	80	40	27	65	55	3.5	10	16	11	16	4.3	12.5	0.9		
LB-CBB-20	20	45	16	100	95	45	30	75	70	7.5	10	20	11	20	4.3	20	1.5		
LB-CBB-25	25	56	25	120	115	55	37	90	85	10	10	25	13.5	25	5.4	32	2.7		
LB-CBB-32	32	70	25	145	145	65	43	110	110	14.5	6	32	17.5	32	5.4	50	4.5		
LB-CBB-40	40	90	36	185	170	76	52	140	125	17.5	6	40	22	40	8.4	80	8.5		
LB-CBB-50	50	110	36	215	200	95	65	165	150	25	-	50	26	50	8.4	125	13.5		
LB-CBB-63	63	140	50	270	230	112	75	210	170	33	-	63	33	63	11.4	200	23.4		
LB-CBB-80	80	170	50	320	280	140	95	250	210	45	-	80	39	80	11.4	320	38.5		

Passende Bolzen BO-B5 und BO-PP ■ Bolts to fit BO-B5 and BO-PP ■ Axes spéciaux BO-B5 et BO-PP

Maße in mm ■ Dimensions in mm ■ Dimensions en mm

**LB-LD**

**LB-LD . 20**

Nach DIN 24556 ■ According to DIN 24556 ■ Selon DIN 24556

Typ ■ Type ■ Type	l <sub>b</sub>	k	i	h	p	f	q	r	b	a	g	c	d	o	m	n	e	Nennkraft (KN)		Gewicht (kg)	
																		■ Nominal power (KN)	■ Force nominale (KN)	■ Weight (kg)	■ Poids (kg)
LB-LD-12	12	30	10	40	29	28	56	12	75	60	46	40	55	16	10	3.3	9	8	0.52		
LB-LD-16	16	40	14	50	38	37	74	16	95	80	61	55	70	18	16	4.3	11	12.5	1.05		
LB-LD-20	20	50	16	55	40	39	80	20	120	90	64	58	85	20	16	4.3	13,5	20	1.72		
LB-LD-25	25	60	20	65	49	48	98	25	140	110	78	70	100	22	25	5.4	15,5	32	2.72		
LB-LD-30	30	70	22	85	63	62	120	30	160	135	97	90	115	24	25	5.4	17,5	50	5.15		
LB-LD-40	40	80	28	100	73	72	148	40	190	170	123	120	135	24	36	8.4	22	80	9.3		
LB-LD-50	50	100	35	125	92	90	190	50	240	215	155	145	170	35	36	8.4	30	125	18.3		
LB-LD-60	60	120	44	150	110	108	225	60	270	260	187	185	200	35	50	11.4	39	200	35		
LB-LD-80	80	160	55	190	142	140	295	80	320	340	255	260	240	35	50	11.4	45	320	63		
LB-LD-100	100	200	70	210	152	150	335	100	400	400	285	300	300	35	63	12.4	48	500	109		

Passende Bolzen BO-BS und BO-BA

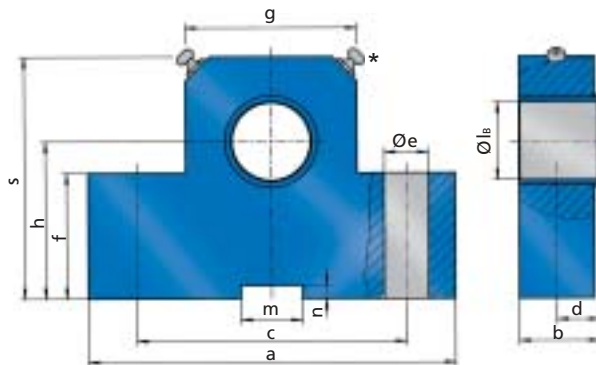
■ Bolts to fit BO-BS and BO-BA

■ Axes spéciaux BO-BS et BO-BA

Maße in mm

■ Dimensions in mm

■ Dimensions en mm


**LB-TB/SD**

**LB-TB . 20**

Nach ISO 8132 ■ According to ISO 8132 ■ Selon ISO 8132

\*Die Position der Schmiernippel kann abweichen

■ \*The position of the lubrication nipples may deviate

■ \*La position des embouts de graissage peut varier

Typ ■ Type ■ Type	l <sub>b</sub> H7	h		f		s		a	b	c	d	e <sup>H13</sup>	g	m <sub>JS14</sub>	n	Nennkraft (KN)		Gewicht (kg)	
		TB	SD	TB	SD	■ Nominal power (KN)	■ Force nominale (KN)									TB	SD		
LB-TB/SD-12	12	34	38	25	49	55	63	17	40	8	9	25	10	3.3	8	0.46	0.48		
LB-TB/SD-16	16	40	45	30	59	65	80	21	50	10	11	30	16	4.3	12.5	0.83	0.87		
LB-TB/SD-20	20	45	55	38	69	80	90	21	60	10	11	40	16	4.3	20	1.21	1.30		
LB-TB/SD-25	25	55	65	45	80	90	110	26	80	12	14	56	25	5.4	32	2.15	2.35		
LB-TB/SD-32	32	65	75	52	100	110	150	33	110	15	18	70	25	5.4	50	4.63	4.80		
LB-TB/SD-40	40	76	95	60	120	140	170	41	125	16	22	88	36	8.4	80	7.78	8.10		
LB-TB/SD-50	50	95	105	75	140	150	210	51	160	20	26	90	36	8.4	125	14.3	20.10		
LB-TB/SD-63	63	112	125	85	177	195	265	61	200	25	33	136	50	11.4	200	23.4	31.30		
LB-TB/SD-80	80	140	150	112	220	230	325	81	250	31	39	160	50	11.4	320	53.1	69.30		
LB-SD-100	100	-	200	150	-	300	410	101	320	42	52	200	63	12.4	500	-	-		

Kein Bolzen erforderlich

■ No bolt required

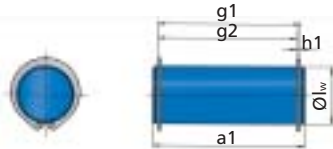
■ Exécution sans axe de fixation

Maße in mm

■ Dimensions in mm

■ Dimensions en mm

## BO-BS



BO-BS . 012 . 030

Die Sicherungsringe sind im Lieferumfang enthalten

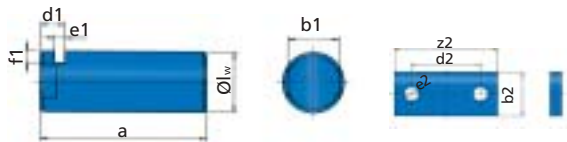
- The retaining rings are contained in the scope of supply.
- Les circlips d'arrêt sont inclus dans la livraison

Typ ■ Type ■ Type	lw	g2	g1 <sup>+0,1</sup>	a1	h1 <sup>H13</sup>	Sicherungsring	Gewicht (kg) ■ Weight (kg) ■ Poids (kg)
						■ Retaining ring ■ Circlip d'arrêt	
BO-BS-12	12	30	33	35	1.1	DIN 471-12x1	0.03
BO-BS-16	16	40	43	46	1.1	DIN 471-16x1	0.08
BO-BS-20	20	50	53.4	57	1.3	DIN 471-20x1.2	0.14
BO-BS-25	25	60	63.4	67	1.3	DIN 471-25x1.2	0.26
BO-BS-30	30	70	74	79	1.6	DIN 471-30x1.5	0.44
BO-BS-40	40	80	84.5	93	1.85	DIN 471-40x1.75	0.90
BO-BS-50	50	100	105	115	2.15	DIN 471-50x2	1.70
BO-BS-60	60	120	125	135	2.15	DIN 471-60x2	3.10
BO-BS-80	80	160	166	178	2.65	DIN 471-80x2.5	7.10
BO-BS-100	100	200	207	221	3.15	DIN 471-100x3	14.40

Passend zu Lagerbock LB-LD ■ To fit bearing pedestal LB-LD ■ Spécial pour support LB-LD

Maße in mm ■ Dimensions in mm ■ Dimensions en mm

## BO-BA



BO-BA . 012 . 40

Das Sicherungsblech ist im Lieferumfang enthalten

- The retaining strip is contained in the scope of supply.
- La plaque d'arrêt est incluse dans la livraison

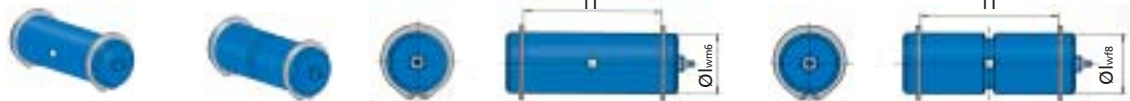
Typ ■ Type ■ Type	lw	a1*	a	a2**	d1	e1	b1	f1	e2	d2	z2	b2	Gewicht (kg) ■ Weight (kg) ■ Poids (kg)
BO-BA-12	12	40	38	8	3.3	10	4	6.4	16	27	15	0.04	
BO-BA-16	16	50	46	8	3.3	13	4	6.4	16	30	15	0.08	
BO-BA-20	20	62	58	10	4.5	17	5	6.4	25	40	18	0.15	
BO-BA-25	25	72	69	10	4.5	22	5	6.4	25	40	18	0.27	
BO-BA-30	30	85	-	13	5.5	24	6	6.4	30	45	20	0.41	
BO-BA-32	32	-	87	13	5.5	27	6	6.4	30	45	20	0.45	
BO-BA-40	40	100	110	16	6.5	32	7	8.4	42	62	20	0.91	
BO-BA-50	50	122	133	19	9	41	8	8.4	45	65	25	1.71	
BO-BA-60	60	145	-	20	9	50	9	10.5	55	80	25	3.13	
BO-BA-63	63	-	164	20	9	55	9	10.5	55	80	25	3.13	
BO-BA-80	80	190	202	26	11	70	11	10.5	60	90	30	7.14	
BO-BA-100	100	235	-	30	13	90	14	10.5	90	120	40	14.4	

\*a1 passend zu Lagerbock LB-LD ■ \*a1 to fit bearing pedestal LB-LD ■ \*a1 spécial pour support LB-LD

Maße in mm ■ Dimensions in mm ■ Dimensions en mm

\*\*a2 passend zu Lagerbock LB-CBA/CBB ■ \*\*a2 to fit bearing pedestal LB-CBA/CBB ■ \*\*a2 spécial pour support LB-CBA/CBB

## BO-PP



LB-CBA . 012 . m6

Typ ■ Type ■ Type	lwf8/m6	i1 <sup>H16</sup>	Nennkraft	Gewicht (kg) ■ Weight (kg) ■ Poids (kg)
			■ Nominal power (KN) ■ Force nominale (KN)	
BO-PP-10	10	25	5	0.01
BO-PP-12	12	29	8	0.03
BO-PP-16	16	37	12	0.60
BO-PP-20	20	46	20	0.13
BO-PP-25	25	57	32	0.25
BO-PP-32	32	72	50	0.50
BO-PP-40	40	92	80	1.00
BO-PP-50	50	112	125	1.90
BO-PP-63	63	142	200	3.80
BO-PP-80	80	172	320	7.60

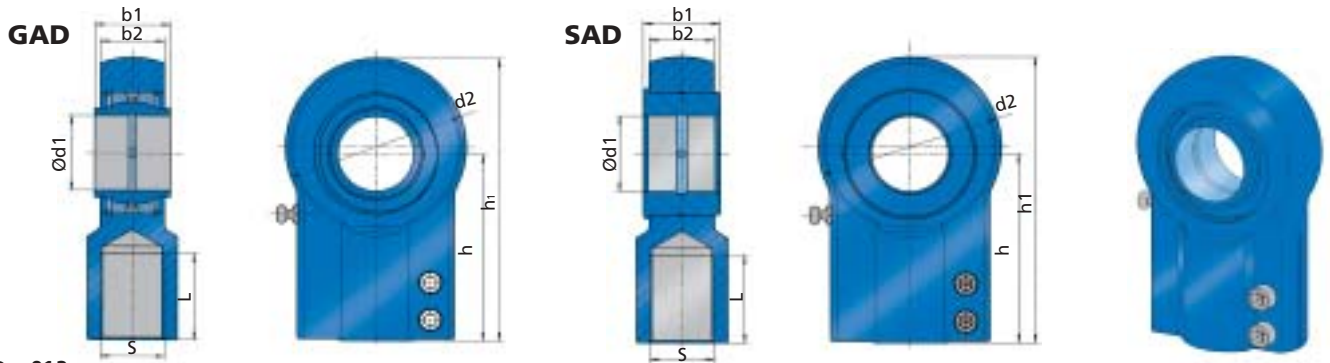
Passend zu Lagerbock LB-CBA und LB-CBB ■ To fit bearing pedestal LB-CBA and LB-CBB

Maße in mm ■ Dimensions in mm ■ Dimensions en mm

■ Spécial pour supports LB-CBA et LB-CBB



## GAD / SAD



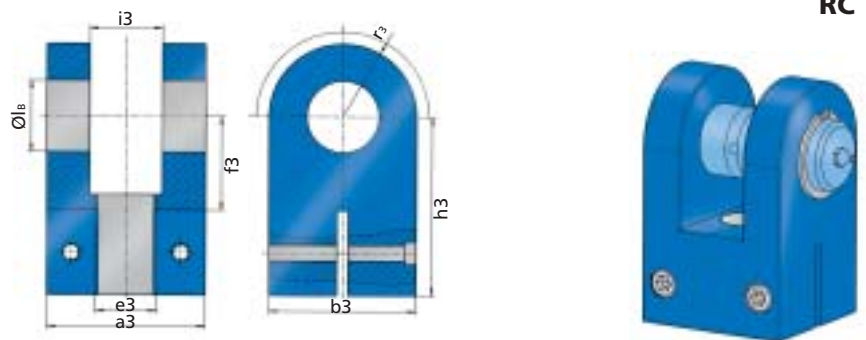
### GAD . 012

Gelenk-		d1 <sup>H7</sup>	S	h	h1	L	b1	b2	d2
<span style="color: #00A651;">■</span> Joint <span style="color: #4F81BD;">■</span> Articulation									
GAD-012	SAD-012	12	M12x1,25	38	54	17	12	10,5	32
GAD-016	SAD-016	16	M14x1,5	44	64	19	16	13	40
GAD-020	SAD-020	20	M16x1,5	52	75,2	23	20	17	47
GAD-025	SAD-025	25	M20x1,5	65	94	29	25	21	58
GAD-032	SAD-032	32	M27x2	80	115	37	32	27	70
GAD-040	SAD-040	40	M33x2	97	141,5	46	40	32	89
GAD-050	SAD-050	50	M42x2	120	174	57	50	40	108
GAD-063	SAD-063	63	M48x2	140	211	64	63	52	132
GAD-070	SAD-070	70	M56x2	160	245	76	70	57	155
GAD-080	SAD-080	80	M64x3	180	270	86	80	66	168
GAD-090	SAD-090	90	M72x3	195	296	91	90	72	185
GAD-100	SAD-100	100	M80x3	210	322	96	100	84	210
GAD-125	SAD-125	125	M100x3	260	405	113	125	102	262

Passende Bolzen BO-PP ■ Bolts to fit BO-PP ■ Axes spéciaux BO-PP

Maße in mm ■ Dimensions in mm ■ Dimensions en mm

### RC . 016



Typ	l <sub>6</sub> <sup>H9</sup>	a3	i3	h3	f3	e3	b3	r3	Nennkraft (KN)	Gewicht (kg)
<span style="color: #00A651;">■</span> Type <span style="color: #4F81BD;">■</span> Type									<span style="color: #00A651;">■</span> Nominal power (KN) <span style="color: #4F81BD;">■</span> Force nominale (KN)	<span style="color: #00A651;">■</span> Weight (kg) <span style="color: #4F81BD;">■</span> Poids (kg)
RC-10	10	24	10	37	18	M10x1.25	20	11	5	0,10
RC-12	12	28	12	38	18	M12x1.25	25	16	8	0,16
RC-16	16	36	16	44	22	M14x1.5	30	20	12.5	0,27
RC-20	20	45	20	52	27	M16x1.5	40	25	20	0,53
RC-25	25	56	25	65	34	M20x1.5	50	32	32	1,12
RC-32	32	70	32	80	42	M27x2	65	40	50	2,18
RC-40	40	90	40	97	52	M33x2	80	50	80	4,40
RC-50	50	110	50	120	64	M42x2	100	63	125	7,60
RC-63	63	140	63	140	75	M48x2	120	71	200	17,70
RC-80	80	170	80	180	94	M64x3	150	90	320	30,60

Passende Bolzen BO-PP ■ Bolts to fit BO-PP ■ Axes spéciaux BO-PP

Maße in mm ■ Dimensions in mm ■ Dimensions en mm



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