

# Series 90 stainless steel cylinders

Single- and double-acting, cushioned, magnetic  
 $\varnothing$  32, 40, 50, 63, 80, 100 and 125 mm



SERIES 90 STAINLESS STEEL CYLINDERS



- » In compliance with ISO 15552 standards and with the previous DIN/ISO 6431/VDMA 24562 standards
- » Clean design
- » Stainless steel AISI 316
- » End-stroke cushioning

The Series 90 cylinders can be used in critical applications in which a high corrosion resistance is required (for example off-shore, marine, food).

This series of cylinders is normally equipped with end of stroke buffers with adjustable pneumatic cushioning. Moreover, they are equipped with a mechanical cushioning that makes the impact of the piston less noisy as it reaches the end of the stroke.

## GENERAL DATA

|                              |  |
|------------------------------|--|
| <b>Construction</b>          | with tie-rods  |
| <b>Operation</b>             | single-acting or double-acting   |
| <b>Materials</b>             | - end blocks, barrel and rod in stainless steel AISI 316<br>- seals in NBR<br>- plastic guiding element, NSF H1-certified lubricant                              |
| <b>Mountings</b>             | several types of cylinders mounting brackets available   |
| <b>Stroke</b>                | 25 ÷ 800 mm  |
| <b>Operating temperature</b> | 0°C ÷ 80°C (with dry air - 20°C)   |
| <b>Operating pressure</b>    | 1 ÷ 10 bar   |
| <b>Speed</b>                 | 10 ÷ 1000 mm/sec (no load)   |
| <b>Media</b>                 | Filtered air, without lubrication.<br>If lubricated air is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted. |

### STANDARD STROKES FOR CYLINDER SERIES 90

- ✕ = Double-acting
- = Single-acting

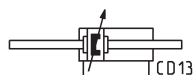
| STANDARD STROKES |    |    |    |     |     |     |     |     |     |     |     |     |     |
|------------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ∅                | 25 | 50 | 80 | 100 | 125 | 150 | 160 | 200 | 250 | 300 | 320 | 400 | 500 |
| 32               | ✕● | ✕● | ✕  | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   |
| 40               | ✕● | ✕● | ✕  | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   |
| 50               | ✕● | ✕● | ✕  | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   |
| 63               | ✕● | ✕● | ✕  | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   |
| 80               | ✕● | ✕● | ✕  | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   |
| 100              | ✕● | ✕● | ✕  | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   |
| 125              |    | ✕● | ✕  | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   | ✕   |

### CODING EXAMPLE

|             |   |          |          |            |   |             |  |
|-------------|---|----------|----------|------------|---|-------------|--|
| <b>90</b>   | <b>M</b>  | <b>2</b> | <b>A</b> | <b>050</b> | <b>A</b>                                  | <b>0200</b> |  |
| <b>90</b>   | SERIES  |          |          |            |   |             |  |
| <b>M</b>    | VERSION<br>M = standard, magnetic   |          |          |            |   |             |  |
| <b>2</b>    | OPERATION<br>1 = single-acting, front spring<br>2 = double-acting, front and rear cushions<br>6 = double-acting, through-rod, front and rear cushions |          |          |            | PNEUMATIC SYMBOLS<br>CS06<br>CD09<br>CD13 |             |  |
| <b>A</b>    | MATERIALS<br>A = stainless steel AISI 316, seals in NBR<br>V = stainless steel AISI 316, all seals in FKM (150°C)                                     |          |          |            |   |             |  |
| <b>050</b>  | BORE<br>032 = 32 mm - 040 = 40 mm - 050 = 50 mm - 063 = 63 mm<br>080 = 80 mm - 100 = 100 mm - 125 = 125 mm  |          |          |            |   |             |  |
| <b>A</b>    | TYPE OF DESIGN<br>A = standard with piston rod lock nut Mod. U  |          |          |            |   |             |  |
| <b>0200</b> | STROKE (see the table)  |          |          |            |   |             |  |
|             | = standard<br>V = rod seal in FKM   |          |          |            |   |             |  |

### PNEUMATIC SYMBOLS

The pneumatic symbols which have been indicated in the CODING EXAMPLE are shown below.

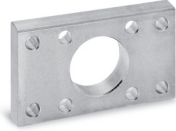


**ACCESSORIES FOR STAINLESS STEEL CYLINDERS SERIES 90**

SERIES 90 STAINLESS STEEL CYLINDERS



Foot mount Mod. B



Front and rear flange Mod. D-E



Rear trunnion, female Mod. C-H



Rear trunnion, male Mod. L



Tight rear female tr. bracket Mod. CR



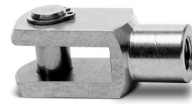
Male tr. bracket with swivel ball joint Mod. R



90° male tr. bracket + sw. ball joint Mod. ZCR



90° male trunnion Mod. ZC



Rod fork end Mod. G-90



Clevis pin Mod. S-90



Anti-rotation clevis pin Mod. SR-90



Swivel ball joint Mod. GA-90



Piston rod lock nut Mod. U-90

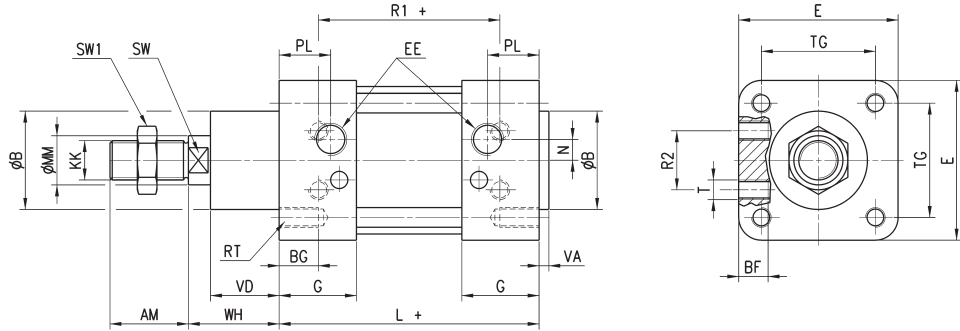


All accessories are supplied separately, except for the piston rod lock nut Mod. U

### Cylinders Series 90



+ = add the stroke

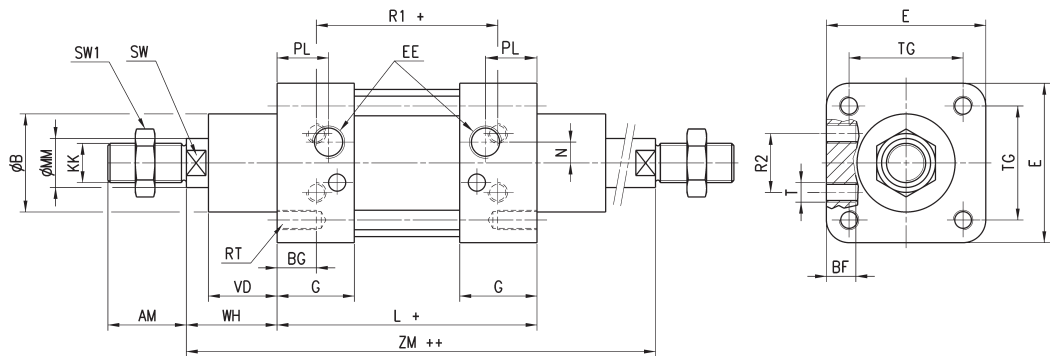


| DIMENSIONS |    |    |    |    |     |      |      |          |     |    |      |    |     |     |    |    |     |     |      |    |    |    |
|------------|----|----|----|----|-----|------|------|----------|-----|----|------|----|-----|-----|----|----|-----|-----|------|----|----|----|
| Ø          | AM | B  | BF | BG | E   | EE   | G    | KK       | L   | MM | N    | PL | RT  | R1  | R2 | SW | SW1 | T   | TG   | VA | VD | WH |
| 32         | 22 | 30 | 10 | 16 | 45  | G1/8 | 28   | M10x1.25 | 94  | 12 | 4.5  | 14 | M6  | 64  | 16 | 10 | 17  | M5  | 32.5 | 4  | 20 | 26 |
| 40         | 24 | 35 | 10 | 16 | 55  | G1/4 | 31.5 | M12x1.25 | 105 | 16 | 5.5  | 16 | M6  | 70  | 21 | 13 | 19  | M6  | 38   | 4  | 22 | 30 |
| 50         | 32 | 40 | 12 | 16 | 65  | G1/4 | 31.5 | M16x1.5  | 106 | 20 | 8.5  | 21 | M8  | 74  | 24 | 17 | 24  | M8  | 46.5 | 4  | 28 | 37 |
| 63         | 32 | 45 | 12 | 16 | 80  | G3/8 | 35   | M16x1.5  | 121 | 20 | 8.5  | 22 | M8  | 85  | 33 | 17 | 24  | M8  | 56.5 | 4  | 28 | 37 |
| 80         | 40 | 45 | 15 | 16 | 95  | G3/8 | 36   | M20x1.5  | 128 | 25 | 8.5  | 23 | M10 | 92  | 34 | 21 | 30  | M10 | 72   | 4  | 34 | 46 |
| 100        | 40 | 55 | 15 | 16 | 115 | G1/2 | 41   | M20x1.5  | 138 | 25 | 10   | 26 | M10 | 100 | 58 | 21 | 30  | M10 | 89   | 4  | 38 | 51 |
| 125        | 54 | 60 | 24 | 20 | 140 | G1/2 | 45   | M27x2    | 160 | 32 | 12.5 | 30 | M12 | 110 | 65 | 27 | 41  | M12 | 110  | 5  | 50 | 65 |

### Cylinders Series 90 - through-rod



+ = add the stroke once  
++ = add the stroke twice



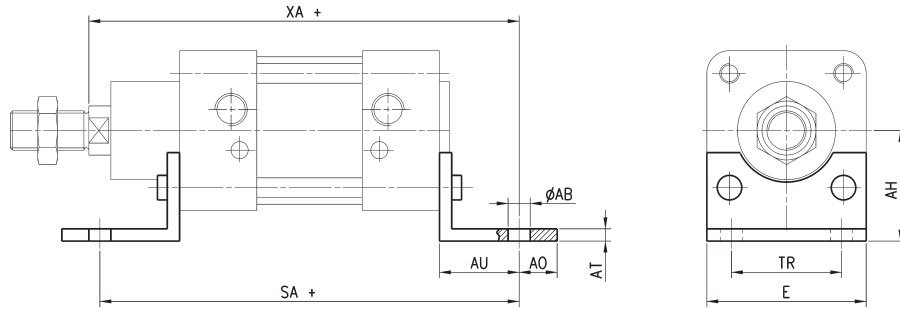
| DIMENSIONS |    |    |    |    |     |      |      |          |     |    |      |    |     |     |    |    |     |     |      |    |    |     |
|------------|----|----|----|----|-----|------|------|----------|-----|----|------|----|-----|-----|----|----|-----|-----|------|----|----|-----|
| Ø          | AM | B  | BF | BG | E   | EE   | G    | KK       | L   | MM | N    | PL | RT  | R1  | R2 | SW | SW1 | T   | TG   | VD | WH | ZM  |
| 32         | 22 | 30 | 10 | 16 | 45  | G1/8 | 28   | M10x1.25 | 94  | 12 | 4.5  | 14 | M6  | 64  | 16 | 10 | 17  | M5  | 32.5 | 20 | 26 | 146 |
| 40         | 24 | 35 | 10 | 16 | 55  | G1/4 | 31.5 | M12x1.25 | 105 | 16 | 5.5  | 16 | M6  | 70  | 21 | 13 | 19  | M6  | 38   | 22 | 30 | 165 |
| 50         | 32 | 40 | 12 | 16 | 65  | G1/4 | 31.5 | M16x1.5  | 106 | 20 | 8.5  | 21 | M8  | 74  | 24 | 17 | 24  | M8  | 46.5 | 28 | 37 | 180 |
| 63         | 32 | 45 | 12 | 16 | 80  | G3/8 | 35   | M16x1.5  | 121 | 20 | 8.5  | 22 | M8  | 85  | 33 | 17 | 24  | M8  | 56.5 | 28 | 37 | 195 |
| 80         | 40 | 45 | 15 | 16 | 95  | G3/8 | 36   | M20x1.5  | 128 | 25 | 8.5  | 23 | M10 | 92  | 34 | 21 | 30  | M10 | 72   | 34 | 46 | 220 |
| 100        | 40 | 55 | 15 | 16 | 115 | G1/2 | 41   | M20x1.5  | 138 | 25 | 10   | 26 | M10 | 100 | 58 | 21 | 30  | M10 | 89   | 38 | 51 | 240 |
| 125        | 54 | 60 | 24 | 20 | 140 | G1/2 | 45   | M27x2    | 160 | 32 | 12.5 | 30 | M12 | 110 | 65 | 27 | 41  | M12 | 110  | 50 | 65 | 290 |

**Foot mount Mod. B**

Material: stainless steel 316



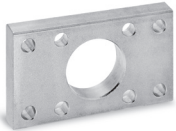
Supplied with:  
2x feet  
4x screws  
+ = add the stroke



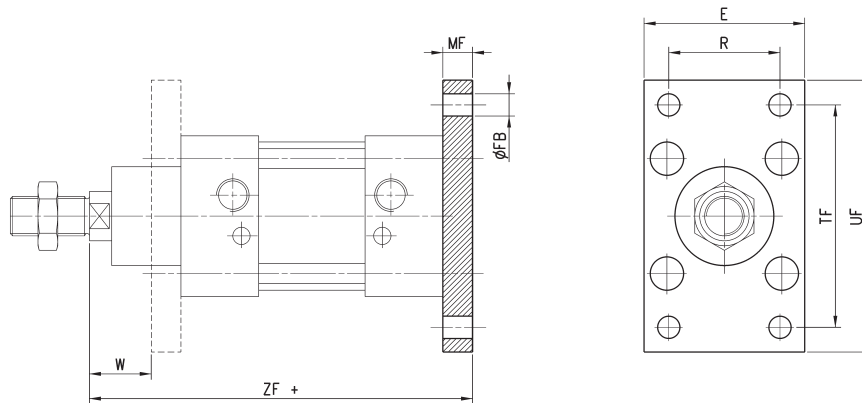
| DIMENSIONS |     |     |    |    |    |    |     |    |     |     |
|------------|-----|-----|----|----|----|----|-----|----|-----|-----|
| Mod.       | ∅   | ∅AB | AH | AO | AT | AU | E   | TR | SA+ | XA+ |
| B-90-32    | 32  | 7   | 32 | 11 | 4  | 24 | 45  | 32 | 142 | 144 |
| B-90-40    | 40  | 9   | 36 | 8  | 4  | 28 | 52  | 36 | 161 | 163 |
| B-90-50    | 50  | 9   | 45 | 15 | 5  | 32 | 65  | 45 | 170 | 175 |
| B-90-63    | 63  | 9   | 50 | 13 | 5  | 32 | 75  | 50 | 185 | 190 |
| B-90-80    | 80  | 12  | 63 | 14 | 6  | 41 | 95  | 63 | 210 | 215 |
| B-90-100   | 100 | 14  | 75 | 16 | 6  | 41 | 115 | 75 | 220 | 230 |
| B-90-125   | 125 | 16  | 90 | 25 | 8  | 45 | 140 | 90 | 250 | 270 |

**Front and rear flange Mod. D-E**

Material: stainless steel 316



Supplied with:  
1x flange  
4x screws  
+ = add the stroke



| DIMENSIONS |     |     |     |    |     |     |    |     |    |  |
|------------|-----|-----|-----|----|-----|-----|----|-----|----|--|
| Mod.       | ∅   | E   | ∅FB | MF | TF  | UF  | W  | ZF+ | R  |  |
| D-E-90-32  | 32  | 45  | 7   | 10 | 64  | 80  | 16 | 130 | 32 |  |
| D-E-90-40  | 40  | 52  | 9   | 10 | 72  | 90  | 20 | 145 | 36 |  |
| D-E-90-50  | 50  | 65  | 9   | 12 | 90  | 110 | 25 | 155 | 45 |  |
| D-E-90-63  | 63  | 75  | 9   | 12 | 100 | 120 | 25 | 170 | 50 |  |
| D-E-90-80  | 80  | 95  | 12  | 15 | 126 | 150 | 30 | 190 | 63 |  |
| D-E-90-100 | 100 | 115 | 14  | 15 | 150 | 170 | 35 | 205 | 75 |  |
| D-E-90-125 | 125 | 140 | 16  | 20 | 180 | 205 | 45 | 245 | 90 |  |

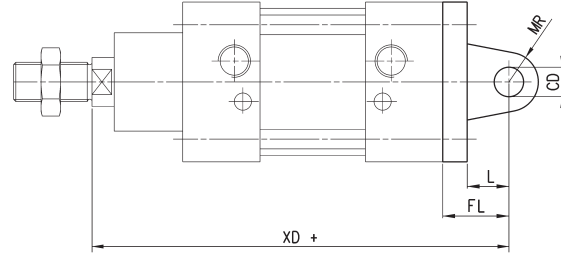
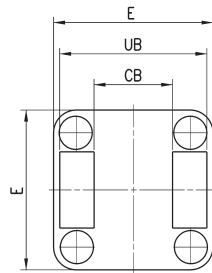
### Rear trunnion, female Mod. C-H

Material: stainless steel 316



Supplied:  
1x female trunnion  
4x screws

+ = add the stroke



| DIMENSIONS |     |    |    |     |    |    |    |     |     |
|------------|-----|----|----|-----|----|----|----|-----|-----|
| Mod.       | ∅   | CB | CD | E   | FL | L  | MR | UB  | XD+ |
| C-H-90-32  | 32  | 26 | 10 | 45  | 22 | 12 | 10 | 45  | 142 |
| C-H-90-40  | 40  | 28 | 12 | 55  | 25 | 15 | 12 | 52  | 161 |
| C-H-90-50  | 50  | 32 | 12 | 65  | 27 | 17 | 12 | 60  | 170 |
| C-H-90-63  | 63  | 40 | 16 | 75  | 32 | 20 | 16 | 70  | 185 |
| C-H-90-80  | 80  | 50 | 16 | 95  | 36 | 22 | 16 | 90  | 210 |
| C-H-90-100 | 100 | 60 | 20 | 115 | 41 | 25 | 20 | 110 | 230 |
| C-H-90-125 | 125 | 70 | 25 | 140 | 50 | 30 | 25 | 130 | 275 |

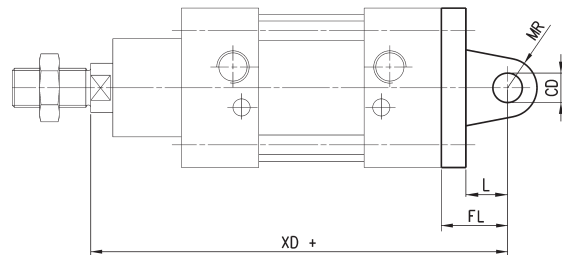
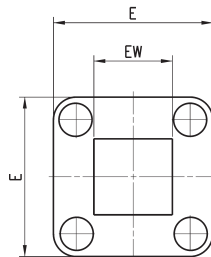
### Rear trunnion, male Mod. L

Material: stainless steel 316



Supplied:  
1x male trunnion  
4x screws

+ = add the stroke



| DIMENSIONS |     |    |    |     |    |    |    |     |  |
|------------|-----|----|----|-----|----|----|----|-----|--|
| Mod.       | ∅   | EW | CD | E   | FL | L  | MR | XD+ |  |
| L-90-32    | 32  | 26 | 10 | 45  | 22 | 12 | 10 | 142 |  |
| L-90-40    | 40  | 28 | 12 | 55  | 25 | 15 | 12 | 161 |  |
| L-90-50    | 50  | 32 | 12 | 65  | 27 | 17 | 12 | 170 |  |
| L-90-63    | 63  | 40 | 16 | 75  | 32 | 20 | 16 | 185 |  |
| L-90-80    | 80  | 50 | 16 | 95  | 36 | 22 | 16 | 210 |  |
| L-90-100   | 100 | 60 | 20 | 115 | 41 | 25 | 20 | 230 |  |
| L-90-125   | 125 | 70 | 25 | 140 | 50 | 30 | 25 | 275 |  |

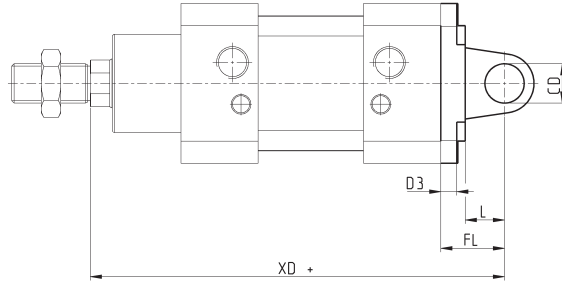
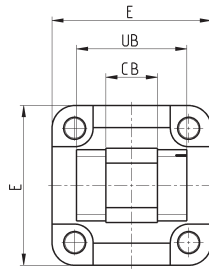
### Tight rear female trunnion bracket Mod. CR

Material: stainless steel 316



Supplied with:  
1x female trunnion bracket  
4x screws

+ = add the stroke



| DIMENSIONS |     |    |    |     |    |    |    |     |     |
|------------|-----|----|----|-----|----|----|----|-----|-----|
| Mod.       | ∅   | CB | CD | E   | FL | L  | UB | XD  | D3  |
| CR-90-32   | 32  | 14 | 10 | 45  | 22 | 12 | 34 | 142 | 5.5 |
| CR-90-40   | 40  | 16 | 12 | 55  | 25 | 25 | 40 | 161 | 5.5 |
| CR-90-50   | 50  | 21 | 16 | 65  | 27 | 27 | 45 | 170 | 6.5 |
| CR-90-63   | 63  | 21 | 16 | 75  | 32 | 32 | 51 | 185 | 6.5 |
| CR-90-80   | 80  | 25 | 20 | 95  | 36 | 36 | 65 | 210 | 10  |
| CR-90-100  | 100 | 25 | 20 | 114 | 41 | 41 | 75 | 230 | 10  |
| CR-90-125  | 125 | 37 | 30 | 140 | 50 | 50 | 97 | 275 | 10  |

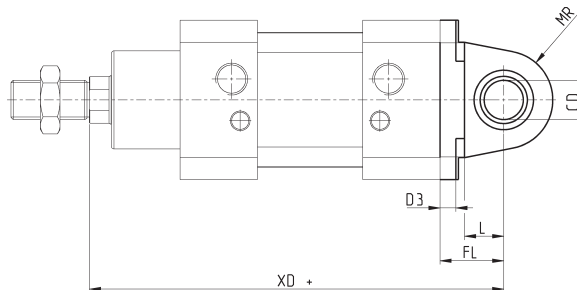
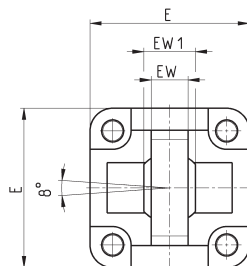
### Male trunnion bracket with swivel ball joint Mod. R

Material: stainless steel 316



Supplied with:  
1x male trunnion bracket  
4x screws

+ = add the stroke



| DIMENSIONS |     |      |     |    |     |    |    |    |     |     |
|------------|-----|------|-----|----|-----|----|----|----|-----|-----|
| Mod.       | ∅   | EW   | EW1 | CD | E   | FL | L  | MR | XD  | D3  |
| R-90-32    | 32  | 10.5 | 14  | 10 | 45  | 22 | 12 | 15 | 142 | 5.5 |
| R-90-40    | 40  | 12   | 16  | 12 | 55  | 25 | 15 | 18 | 161 | 5.5 |
| R-90-50    | 50  | 15   | 21  | 16 | 65  | 27 | 17 | 20 | 170 | 6.5 |
| R-90-63    | 63  | 15   | 21  | 16 | 75  | 32 | 20 | 23 | 185 | 6.5 |
| R-90-80    | 80  | 18   | 25  | 20 | 95  | 36 | 22 | 27 | 210 | 10  |
| R-90-100   | 100 | 18   | 25  | 20 | 115 | 41 | 25 | 30 | 230 | 10  |
| R-90-125   | 125 | 25   | 37  | 30 | 140 | 50 | 30 | 40 | 275 | 10  |

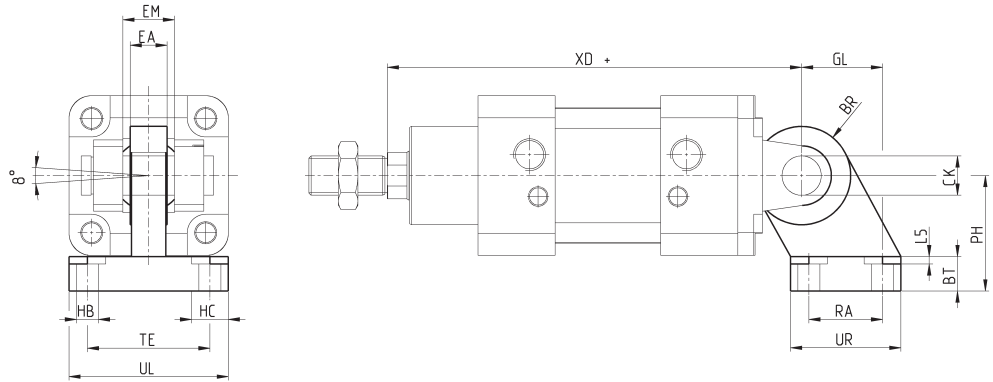
### 90° male trunnion bracket with swivel ball joint Mod. ZCR

Material: stainless steel 316



Supplied with:  
1x male trunnion bracket  
4x screws

+ = add the stroke



| DIMENSIONS |     |     |    |      |    |     |    |    |    |    |     |    |      |    |    |    |
|------------|-----|-----|----|------|----|-----|----|----|----|----|-----|----|------|----|----|----|
| Mod.       | ∅   | UL  | TE | EA   | EM | XD  | GL | BR | CK | PH | L5  | BT | HB   | RA | UR | HC |
| ZCR-90-32  | 32  | 51  | 38 | 10.5 | 14 | 142 | 21 | 15 | 10 | 32 | 1.5 | 10 | 6.6  | 18 | 31 | 11 |
| ZCR-90-40  | 40  | 54  | 41 | 12   | 16 | 160 | 24 | 18 | 12 | 36 | 1.5 | 10 | 6.6  | 22 | 35 | 11 |
| ZCR-90-50  | 50  | 65  | 50 | 15   | 21 | 170 | 33 | 20 | 16 | 45 | 1.5 | 12 | 9    | 30 | 45 | 15 |
| ZCR-90-63  | 63  | 67  | 52 | 15   | 21 | 190 | 37 | 23 | 16 | 50 | 1.5 | 12 | 9    | 35 | 50 | 15 |
| ZCR-90-80  | 80  | 86  | 66 | 18   | 25 | 210 | 47 | 27 | 20 | 63 | 2.5 | 14 | 11   | 40 | 60 | 18 |
| ZCR-90-100 | 100 | 96  | 76 | 18   | 25 | 230 | 55 | 30 | 20 | 71 | 2.5 | 15 | 11   | 50 | 70 | 18 |
| ZCR-90-125 | 125 | 124 | 94 | 25   | 37 | 275 | 70 | 40 | 30 | 90 | 3   | 20 | 13.5 | 60 | 90 | 20 |

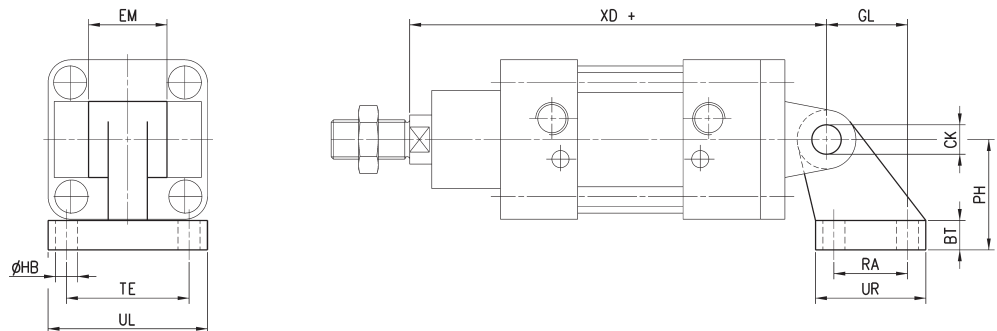
### 90° male trunnion Mod. ZC

Material: stainless steel 316



Supplied with:  
1x male support

+ = add the stroke

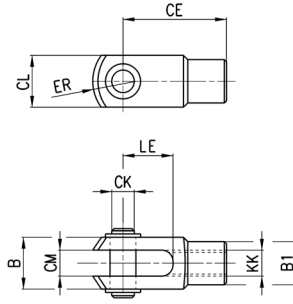
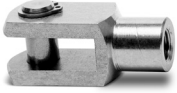


| DIMENSIONS |     |    |    |    |    |     |    |    |    |     |    |     |
|------------|-----|----|----|----|----|-----|----|----|----|-----|----|-----|
| Mod.       | ∅   | BT | CK | EM | GL | ØHB | PH | RA | TE | UL  | UR | XD+ |
| ZC-90-32   | 32  | 8  | 10 | 26 | 21 | 6,6 | 32 | 18 | 38 | 51  | 31 | 142 |
| ZC-90-40   | 40  | 10 | 12 | 28 | 24 | 6,6 | 36 | 22 | 41 | 54  | 35 | 161 |
| ZC-90-50   | 50  | 12 | 12 | 32 | 33 | 9   | 45 | 30 | 50 | 65  | 45 | 170 |
| ZC-90-63   | 63  | 12 | 16 | 40 | 37 | 9   | 50 | 35 | 52 | 67  | 50 | 185 |
| ZC-90-80   | 80  | 14 | 16 | 50 | 47 | 11  | 63 | 40 | 66 | 86  | 60 | 210 |
| ZC-90-100  | 100 | 15 | 20 | 60 | 55 | 11  | 71 | 50 | 76 | 96  | 70 | 230 |
| ZC-90-125  | 125 | 20 | 25 | 70 | 70 | 14  | 90 | 60 | 94 | 124 | 90 | 275 |



### Rod fork end Mod. G-90

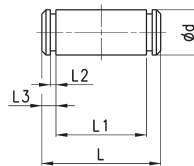
Material: stainless steel 303  
ISO 8140



| DIMENSIONS  |        |     |    |    |    |    |     |          |    |     |
|-------------|--------|-----|----|----|----|----|-----|----------|----|-----|
| Mod.        | ∅      | ∅CK | LE | CM | CL | ER | CE  | KK       | B  | ∅B1 |
| G-90-25-32  | 32     | 10  | 20 | 10 | 20 | 12 | 40  | M10x1,25 | 26 | 18  |
| G-90-40     | 40     | 12  | 24 | 12 | 24 | 14 | 48  | M12x1,25 | 31 | 20  |
| G-90-50-63  | 50-63  | 16  | 32 | 16 | 32 | 19 | 64  | M16x1,5  | 39 | 26  |
| G-90-80-100 | 80-100 | 20  | 40 | 20 | 40 | 25 | 80  | M20x1,5  | 50 | 34  |
| G-90-125    | 125    | 30  | 54 | 30 | 55 | 38 | 110 | M27x2    | 67 | 48  |

### Clevis pin Mod. S-90

Material: stainless steel 303

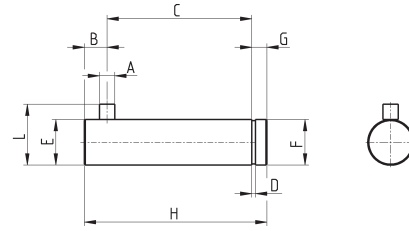


| DIMENSIONS |     |    |     |     |     |     |  |
|------------|-----|----|-----|-----|-----|-----|--|
| Mod.       | ∅   | ∅d | L   | L1  | L2  | L3  |  |
| S-90-32    | 32  | 10 | 53  | 46  | 1,1 | 3   |  |
| S-90-40    | 40  | 12 | 60  | 53  | 1,1 | 3   |  |
| S-90-50    | 50  | 12 | 68  | 61  | 1,1 | 3   |  |
| S-90-63    | 63  | 16 | 78  | 71  | 1,1 | 3   |  |
| S-90-80    | 80  | 16 | 98  | 91  | 1,1 | 3   |  |
| S-90-100   | 100 | 20 | 118 | 111 | 1,3 | 5   |  |
| S-90-125   | 125 | 25 | 139 | 132 | 1,3 | 4,2 |  |

### Antirrotating clevis pin Mod. SR-90



Supplied with:  
1x antirrotating clevis pin  
(stainless steel 316)  
1x seeger (steel)



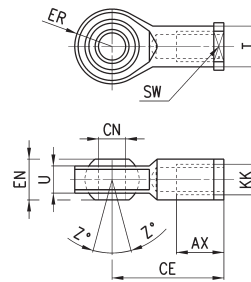
| DIMENSIONS |    |   |     |      |     |    |      |   |    |    |
|------------|----|---|-----|------|-----|----|------|---|----|----|
| Mod.       | ∅  | A | B   | C    | D   | E  | F    | G | H  | L  |
| SR-90-32   | 32 | 3 | 4.5 | 32.5 | 1.1 | 10 | 9.6  | 4 | 41 | 14 |
| SR-90-40   | 40 | 4 | 6   | 38   | 1.1 | 12 | 11.5 | 4 | 48 | 46 |
| SR-90-50   | 50 | 4 | 6   | 43   | 1.1 | 16 | 15.2 | 5 | 54 | 20 |
| SR-90-63   | 63 | 4 | 6   | 49   | 1.1 | 16 | 15.2 | 5 | 60 | 20 |

### Swivel ball joint Mod. GA-90



ISO 8139

Materials:  
- stainless steel 304 bracket  
- stainless steel 420 spherical ring  
- sintered bronze bushing



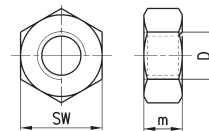
| DIMENSIONS   |        |     |      |    |    |    |     |          |      |     |    |
|--------------|--------|-----|------|----|----|----|-----|----------|------|-----|----|
| Mod.         | ∅      | ∅CN | U    | EN | ER | AX | CE  | KK       | ∅T   | Z   | SW |
| GA-90-32     | 32     | 10  | 10,5 | 14 | 14 | 20 | 43  | M10x1,25 | 15   | 6,5 | 17 |
| GA-90-40     | 40     | 12  | 12   | 16 | 16 | 22 | 50  | M12x1,25 | 17,5 | 6,5 | 19 |
| GA-90-50-63  | 50-63  | 16  | 15   | 21 | 21 | 28 | 64  | M16x1,5  | 22   | 7,5 | 22 |
| GA-90-80-100 | 80-100 | 20  | 18   | 25 | 21 | 33 | 77  | M20x1,5  | 27,5 | 7   | 30 |
| GA-90-125    | 125    | 30  | 25   | 35 | 35 | 51 | 110 | M27x2    | 40   | 7,5 | 41 |

### Piston rod lock nut Mod. U-90



ISO 4035

Material: stainless steel 304



| DIMENSIONS  |        |          |    |    |
|-------------|--------|----------|----|----|
| Mod.        | ∅      | D        | m  | SW |
| U-90-25-32  | 32     | M10x1,25 | 6  | 17 |
| U-90-40     | 40     | M12x1,25 | 7  | 19 |
| U-90-50-63  | 50-63  | M16x1,5  | 8  | 24 |
| U-90-80-100 | 80-100 | M20x1,5  | 9  | 30 |
| U-90-125    | 125    | M27x2    | 12 | 41 |