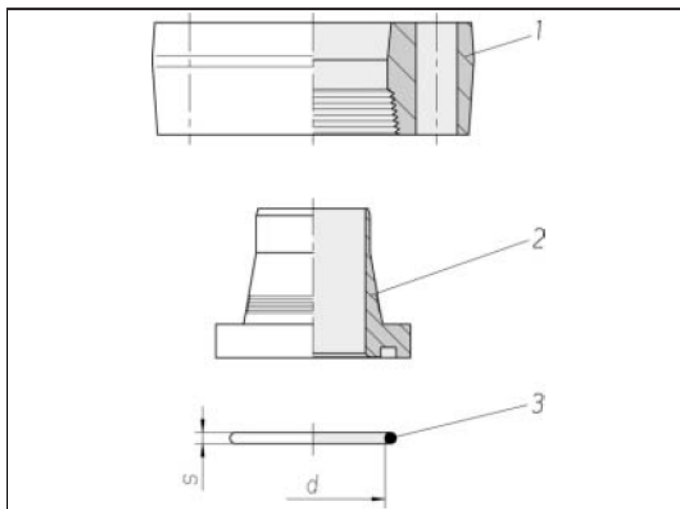


# Tube-to-port flange couplings ZAKO system Component parts

Hole pattern according to  
SAE J 518 C / ISO 6162  
Standard series  
(3000 psi)

Max. permissible operating  
pressure (PB) 250 bar



Flange size	Tube d1 x s	kg/100 approx.	Order No. Part 1	kg/100 approx.	Order No. Part 2 <sup>1)</sup>	O-ring d x s	Order No. Part 3
1/2"	16 x 2	30.6	0 5 10 00 19 00*	4.1	0 0 36 00 99 00**	18.6 x 3.5	0 9 06 74 99 90
1/2"	16 x 2.5	30.6	0 5 10 00 19 00	4.1	0 0 36 02 99 00	18.6 x 3.5	0 9 06 74 99 90
1/2"	16 x 3	30.6	0 5 10 00 19 00	4.1	0 0 36 04 99 00	18.6 x 3.5	0 9 06 74 99 90
3/4"	20 x 2.5	33.7	0 5 10 01 19 00	6.5	0 0 36 06 99 00	25 x 3.5	0 9 06 71 99 90
3/4"	20 x 3	33.7	0 5 10 01 19 00	6.6	0 0 36 08 99 00	25 x 3.5	0 9 06 71 99 90
3/4"	20 x 3.5	33.7	0 5 10 01 19 00	6.9	0 0 36 10 99 00	25 x 3.5	0 9 06 71 99 90
3/4"	25 x 3	45.5	0 5 10 02 19 00	6.9	0 0 36 12 99 00	25 x 3.5	0 9 06 71 99 90
3/4"	25 x 4	45.5	0 5 10 02 19 00	7.2	0 0 36 14 99 00	25 x 3.5	0 9 06 71 99 90
1"	25 x 3	45.5	0 5 10 04 19 00	6.9	0 0 36 12 99 00	25 x 3.5	0 9 06 71 99 90
1"	25 x 4	45.5	0 5 10 04 19 00	7.2	0 0 36 14 99 00	25 x 3.5	0 9 06 71 99 90
1"	30 x 4	54.1	0 5 10 05 19 00	10.3	0 0 36 16 99 00	32.9 x 3.5	0 9 06 72 99 90
1"	30 x 5	54.1	0 5 10 05 19 00	11.5	0 0 36 18 99 00	32.9 x 3.5	0 9 06 72 99 90
1"	38 x 5	54.1	0 5 10 06 19 00	11.6	0 0 36 20 99 00	32.9 x 3.5	0 9 06 72 99 90
1 1/4"	30 x 4	69.8	0 5 10 08 19 00	10.3	0 0 36 16 99 00	32.9 x 3.5	0 9 06 72 99 90
1 1/4"	30 x 5	69.8	0 5 10 08 19 00	11.5	0 0 36 18 99 00	32.9 x 3.5	0 9 06 72 99 90
1 1/4"	38 x 4	66.8	0 5 10 10 19 00	14.5	0 0 36 22 99 00	37.7 x 3.5	0 9 06 73 99 90
1 1/4"	38 x 5	66.8	0 5 10 10 19 00	15.0	0 0 36 24 99 00	37.7 x 3.5	0 9 06 73 99 90
1 1/4"	38 x 6	66.8	0 5 10 10 19 00	15.2	0 0 36 26 99 00	37.7 x 3.5	0 9 06 73 99 90
1 1/4"	42 x 2	65.8	0 5 10 16 19 00	15.9	0 0 36 60 99 00	37.7 x 3.5	0 9 06 73 99 90

Continuation on page 247

When selecting the tube dimensions,  
refer to the pressure specifications of  
the tube manufacturer.

<sup>1)</sup> Complete with O-ring  
(unmounted)

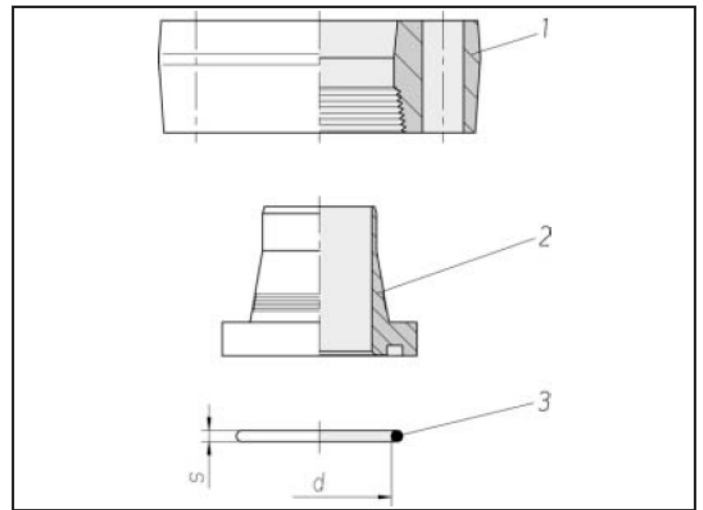
Sample product code, see:  
\* FE-1600-8/3  
\*\* K-1620-8



## Tube-to-port flange couplings ZAKO system Component parts

Hole pattern according to  
SAE J 518 C / ISO 6162  
Standard series  
(3000 psi)

Max. permissible operating  
pressure (PB) 250 bar<sup>2)</sup>



Flange size	Tube d1 x s	kg/100 approx.	Order No. Part 1	kg/100 approx.	Order No. Part 2 <sup>1)</sup>	O-ring d x s	Order No. Part 3
1 1/2"	50 x 2.5	83.3	0 5 10 11 19 00*	27.6	0 0 36 28 99 00**	47.2 x 3.5	0 9 06 54 99 90
1 1/2"	50 x 5	83.3	0 5 10 11 19 00	28.1	0 0 36 30 99 00	47.2 x 3.5	0 9 06 54 99 90
1 1/2"	50 x 6	83.3	0 5 10 11 19 00	28.0	0 0 36 32 99 00	47.2 x 3.5	0 9 06 54 99 90
1 1/2"	50 x 8	83.3	0 5 10 11 19 00	31.3	0 0 36 34 99 00	47.2 x 3.5	0 9 06 54 99 90
1 1/2"	50 x 9	83.3	0 5 10 11 19 00	31.0	0 0 36 36 99 00	47.2 x 3.5	0 9 06 54 99 90
2"	50 x 2.5	136.1	0 5 10 15 19 00	27.6	0 0 36 28 99 00	47.2 x 3.5	0 9 06 54 99 90
2"	50 x 5	136.1	0 5 10 15 19 00	28.1	0 0 36 30 99 00	47.2 x 3.5	0 9 06 54 99 90
2"	50 x 6	136.1	0 5 10 15 19 00	28.0	0 0 36 32 99 00	47.2 x 3.5	0 9 06 54 99 90
2"	50 x 8	136.1	0 5 10 15 19 00	31.3	0 0 36 34 99 00	47.2 x 3.5	0 9 06 54 99 90
2"	50 x 9	136.1	0 5 10 15 19 00	31.0	0 0 36 36 99 00	47.2 x 3.5	0 9 06 54 99 90
2"	65 x 3	123.4	0 5 10 12 19 00	35.2	0 0 36 38 99 00	60 x 3.5	0 9 07 54 99 90
2"	65 x 4	123.4	0 5 10 12 19 00	28.8	0 0 36 40 99 00	60 x 3.5	0 9 07 54 99 90
2"	65 x 5	123.4	0 5 10 12 19 00	32.6	0 0 36 42 99 00	56.7 x 3.5	0 9 06 55 99 90
3"	80 x 3	250.7	0 5 10 14 19 00	86.9	0 0 36 48 99 00	85.3 x 3.5	0 9 06 85 99 90

When selecting the tube dimensions,  
refer to the pressure specifications of  
the tube manufacturer.

<sup>1)</sup> Complete with O-ring  
(unmounted)

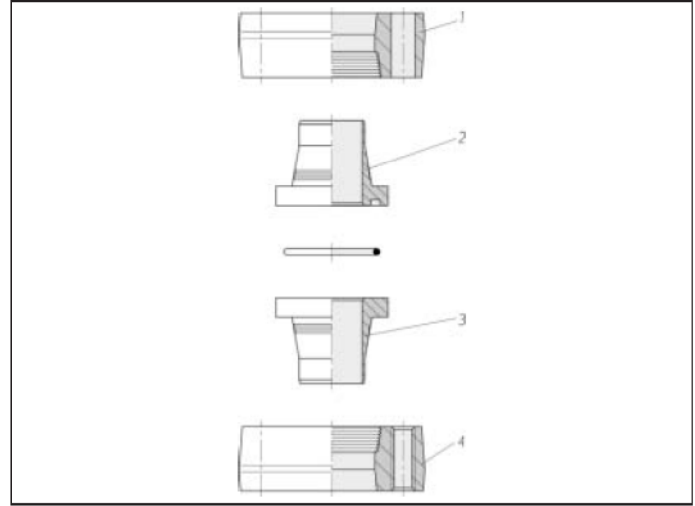
<sup>2)</sup> According to the ASME Code, a  
reduced operating pressure applies  
for the flange sizes 2" and 3"

Sample product code, see:  
\* FE-5000-24/3  
\*\* K-5025-24

# Tube-to-tube flange couplings ZAKO system Component parts

Hole pattern according to  
SAE J 518 C / ISO 6162  
Standard series  
(3000 psi)

Max. permissible operating  
pressure (PB) 250 bar<sup>2)</sup>



Flange size	Tube d1 x s	kg/100 approx.	Order No. Part 1	kg/100 approx.	Order No. Part 2 <sup>1)</sup>	kg/100 approx.	Order No. Part 3	kg/100 approx.	Order No. Part 4
1/2"	16 x 2	30.6	0 5 10 00 19 00**	4.1	0 0 36 00 99 00**	3.3	0 0 36 01 19 00**	28.6	0 5 10 50 19 00**
1/2"	16 x 2.5	30.6	0 5 10 00 19 00	4.1	0 0 36 02 99 00	3.4	0 0 36 03 19 00	28.6	0 5 10 50 19 00
1/2"	16 x 3	30.6	0 5 10 00 19 00	4.1	0 0 36 04 99 00	3.5	0 0 36 05 19 00	28.6	0 5 10 50 19 00
3/4"	20 x 2.5	33.7	0 5 10 01 19 00	6.5	0 0 36 06 99 00	5.3	0 0 36 07 19 00	34.0	0 5 10 51 19 00
3/4"	20 x 3	33.7	0 5 10 01 19 00	6.6	0 0 36 08 99 00	5.7	0 0 36 09 19 00	34.0	0 5 10 51 19 00
3/4"	20 x 3.5	33.7	0 5 10 01 19 00	6.9	0 0 36 10 99 00	5.7	0 0 36 11 19 00	34.0	0 5 10 51 19 00
3/4"	25 x 3	45.5	0 5 10 02 19 00	6.9	0 0 36 12 99 00	5.6	0 0 36 13 19 00	30.8	0 5 10 52 19 00
3/4"	25 x 4	45.5	0 5 10 02 19 00	7.2	0 0 36 14 99 00	5.9	0 0 36 15 19 00	30.8	0 5 10 52 19 00
1"	30 x 4	54.1	0 5 10 05 19 00	10.3	0 0 36 16 99 00	8.8	0 0 36 17 19 00	57.7	0 5 10 55 19 00
1"	30 x 5	54.1	0 5 10 05 19 00	11.5	0 0 36 18 99 00	9.9	0 0 36 19 19 00	57.7	0 5 10 55 19 00
1 1/4"	38 x 4	66.8	0 5 10 10 19 00	14.5	0 0 36 22 99 00	13.9	0 0 36 23 19 00	73.4	0 5 10 57 19 00
1 1/4"	38 x 5	66.8	0 5 10 10 19 00	15.0	0 0 36 24 99 00	13.7	0 0 36 25 19 00	73.4	0 5 10 57 19 00
1 1/4"	38 x 6	66.8	0 5 10 10 19 00	15.2	0 0 36 26 99 00	13.6	0 0 36 27 19 00	73.4	0 5 10 57 19 00
1 1/4"	42 x 2	46.0	0 5 10 16 19 00	16.0	0 0 36 60 99 00	15.0	0 0 36 61 19 00	48.0	0 5 10 63 19 00
1 1/2"	50 x 2.5	83.3	0 5 10 11 19 00	27.6	0 0 36 28 99 00	24.9	0 0 36 29 19 00	90.0	0 5 10 58 19 00
1 1/2"	50 x 5	83.3	0 5 10 11 19 00	28.1	0 0 36 30 99 00	24.9	0 0 36 31 19 00	90.0	0 5 10 58 19 00
1 1/2"	50 x 6	83.3	0 5 10 11 19 00	28.0	0 0 36 32 99 00	24.4	0 0 36 33 19 00	90.0	0 5 10 58 19 00
1 1/2"	50 x 8	83.3	0 5 10 11 19 00	31.3	0 0 36 34 99 00	27.4	0 0 36 35 19 00	90.0	0 5 10 58 19 00
1 1/2"	50 x 9	83.3	0 5 10 11 19 00	31.0	0 0 36 36 99 00	27.1	0 0 36 37 19 00	90.0	0 5 10 58 19 00
2"	65 x 3	123.4	0 5 10 12 19 00	35.2	0 0 36 38 99 00	32.4	0 0 36 39 19 00	129.4	0 5 10 59 19 00
2"	65 x 4	123.4	0 5 10 12 19 00	28.8	0 0 36 40 99 00	26.9	0 0 36 41 19 00	129.4	0 5 10 59 19 00
2"	65 x 5	123.4	0 5 10 12 19 00	32.6	0 0 36 42 99 00	32.0	0 0 36 43 19 00	129.4	0 5 10 59 19 00
3"	80 x 3	250.7	0 5 10 14 19 00	86.9	0 0 36 48 99 00	79.8	0 0 36 49 19 00	257.9	0 5 10 61 19 00

When selecting the tube dimensions,  
refer to the pressure specifications of  
the tube manufacturer.

<sup>2)</sup> According to the ASME Code,  
a reduced operating pressure  
applies for the flange sizes 2" and 3"

<sup>1)</sup> Complete with O-ring  
(supplied as separate part)

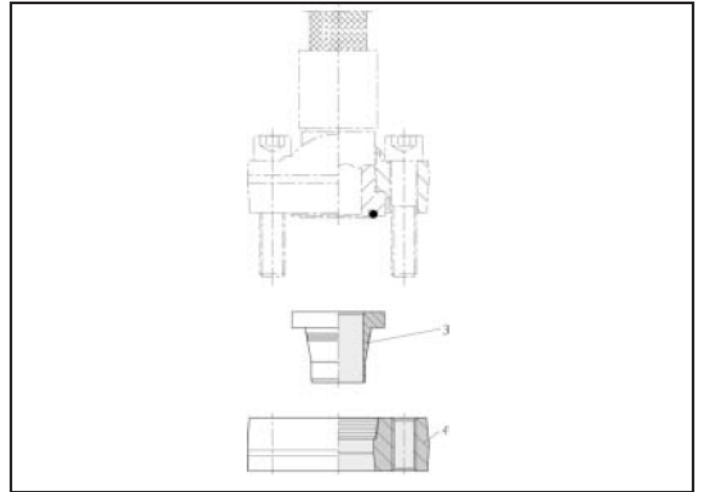
\*\* Sample product code, see:  
(Part 1 to Part 4)  
FE-1600-8/3  
K-1620-8  
KO-1620-8  
FV-1600 8/3



## Tube-to-hose flange couplings ZAKO system Component parts

Hole pattern according to  
SAE J 518 C / ISO 6162  
Standard series  
(3000 psi)

Max. permissible operating  
pressure (PB) 250 bar<sup>1)</sup>



Flange size	Tube d1 x s	kg/100 approx.	Order No. Part 3	kg/100 approx.	Order No. Part 4
1/2"	16 x 2	3.3	0 0 36 01 19 00*	28.6	0 5 10 50 19 00**
1/2"	16 x 2.5	3.4	0 0 36 03 19 00	28.6	0 5 10 50 19 00
1/2"	16 x 3	3.5	0 0 36 05 19 00	28.6	0 5 10 50 19 00
3/4"	20 x 2.5	5.3	0 0 36 07 19 00	34.0	0 5 10 51 19 00
3/4"	20 x 3	5.7	0 0 36 09 19 00	34.0	0 5 10 51 19 00
3/4"	20 x 3.5	5.7	0 0 36 11 19 00	34.0	0 5 10 51 19 00
3/4"	25 x 3	5.6	0 0 36 13 19 00	30.8	0 5 10 52 19 00
3/4"	25 x 4	5.9	0 0 36 15 19 00	30.8	0 5 10 52 19 00
1"	30 x 4	8.8	0 0 36 17 19 00	57.7	0 5 10 55 19 00
1"	30 x 5	9.9	0 0 36 19 19 00	57.7	0 5 10 55 19 00
1 1/4"	30 x 4	8.8	0 0 36 17 19 00	75.5	0 5 10 62 19 00
1 1/4"	30 x 5	9.9	0 0 36 19 19 00	75.5	0 5 10 62 19 00
1 1/4"	38 x 4	13.9	0 0 36 23 19 00	73.4	0 5 10 57 19 00
1 1/4"	38 x 5	13.7	0 0 36 25 19 00	73.4	0 5 10 57 19 00
1 1/4"	38 x 6	13.6	0 0 36 27 19 00	73.4	0 5 10 57 19 00
1 1/4"	42 x 2	16.0	0 0 36 61 19 00	48.0	0 5 10 63 19 00
1 1/2"	50 x 2.5	24.9	0 0 36 29 19 00	90.0	0 5 10 58 19 00
1 1/2"	50 x 5	24.9	0 0 36 31 19 00	90.0	0 5 10 58 19 00
1 1/2"	50 x 6	24.4	0 0 36 33 19 00	90.0	0 5 10 58 19 00
1 1/2"	50 x 8	27.4	0 0 36 35 19 00	90.0	0 5 10 58 19 00
1 1/2"	50 x 9	27.1	0 0 36 37 19 00	90.0	0 5 10 58 19 00
2"	65 x 3	32.4	0 0 36 39 19 00	129.4	0 5 10 59 19 00
2"	65 x 4	26.9	0 0 36 41 19 00	129.4	0 5 10 59 19 00
2"	65 x 5	32.0	0 0 36 43 19 00	129.4	0 5 10 59 19 00
3"	80 x 3	79.8	0 0 36 49 19 00	257.9	0 5 10 61 19 00

When selecting the tube dimensions,  
refer to the pressure specifications of  
the tube manufacturer.

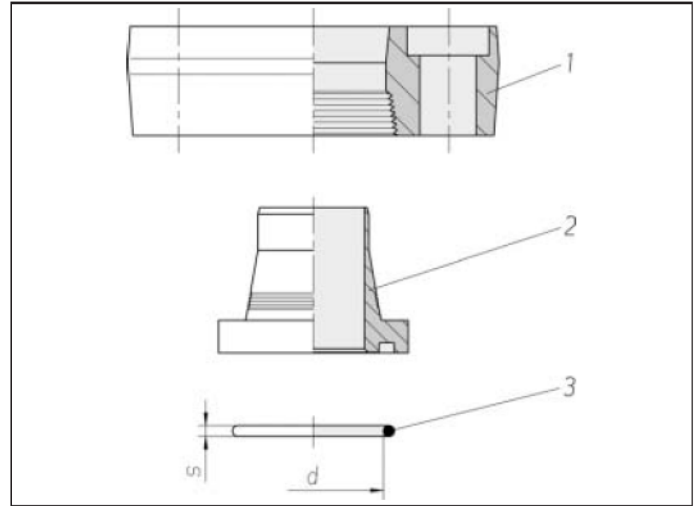
<sup>1)</sup> According to the ASME Code,  
a reduced operating pressure  
applies for the flange sizes 2" and 3"

Sample product code, see:  
\* KO-1620-8  
\*\* FV-1600-8/3

# Tube-to-port flange couplings ZAKO system Component parts

Hole pattern according to  
SAE J 518 C / ISO 6162  
High-pressure series  
(6000 psi)

Max. permissible operating  
pressure (PB) 400 bar



Flange size	Tube d1 x s	kg/100 approx.	Order No. Part 1	kg/100 approx.	Order No. Part 2 <sup>1)</sup>	O-ring d x s	Order No. Part 3
1/2"	16 x 2	26.1	0 5 10 20 19 00*	4.1	0 0 36 00 99 00**	18.6 x 3.5	0 9 06 74 99 90
1/2"	16 x 2.5	26.1	0 5 10 20 19 00	4.1	0 0 36 02 99 00	18.6 x 3.5	0 9 06 74 99 90
1/2"	16 x 3	26.1	0 5 10 20 19 00	4.1	0 0 36 04 99 00	18.6 x 3.5	0 9 06 74 99 90
3/4"	20 x 2.5	49.4	0 5 10 21 19 00	6.5	0 0 36 06 99 00	25 x 3.5	0 9 06 71 99 90
3/4"	20 x 3	49.4	0 5 10 21 19 00	6.6	0 0 36 08 99 00	25 x 3.5	0 9 06 71 99 90
3/4"	20 x 3.5	49.4	0 5 10 21 19 00	6.9	0 0 36 10 99 00	25 x 3.5	0 9 06 71 99 90
3/4"	25 x 3	45.5	0 5 10 22 19 00	6.9	0 0 36 12 99 00	25 x 3.5	0 9 06 71 99 90
3/4"	25 x 4	45.5	0 5 10 22 19 00	7.2	0 0 36 14 99 00	25 x 3.5	0 9 06 71 99 90
1"	30 x 4	68.7	0 5 10 23 19 00	10.3	0 0 36 16 99 00	32.9 x 3.5	0 9 06 72 99 90
1"	30 x 5	68.7	0 5 10 23 19 00	11.5	0 0 36 18 99 00	32.9 x 3.5	0 9 06 72 99 90
1"	38 x 5	59.6	0 5 10 24 19 00	11.7	0 0 36 20 99 00	32.9 x 3.5	0 9 06 72 99 90
1 1/4"	38 x 4	86.1	0 5 10 25 19 00	14.5	0 0 36 22 99 00	37.7 x 3.5	0 9 06 73 99 90
1 1/4"	38 x 5	86.1	0 5 10 25 19 00	15.0	0 0 36 24 99 00	37.7 x 3.5	0 9 06 73 99 90
1 1/4"	38 x 6	86.1	0 5 10 25 19 00	15.1	0 0 36 26 99 00	37.7 x 3.5	0 9 06 73 99 90
1 1/2"	50 x 5	154.0	0 5 10 28 19 00	28.1	0 0 36 30 99 00	47.2 x 3.5	0 9 06 54 99 90
1 1/2"	50 x 6	154.0	0 5 10 28 19 00	28.0	0 0 36 32 99 00	47.2 x 3.5	0 9 06 54 99 90
1 1/2"	50 x 8	154.0	0 5 10 28 19 00	31.3	0 0 36 34 99 00	47.2 x 3.5	0 9 06 54 99 90
1 1/2"	50 x 9	154.0	0 5 10 28 19 00	31.0	0 0 36 36 99 00	47.2 x 3.5	0 9 06 54 99 90
2"	50 x 5	304.0	0 5 10 32 19 00	28.1	0 0 36 30 99 00	47.2 x 3.5	0 9 06 54 99 90
2"	50 x 6	304.0	0 5 10 32 19 00	28.0	0 0 36 32 99 00	47.2 x 3.5	0 9 06 54 99 90
2"	50 x 8	304.0	0 5 10 32 19 00	31.3	0 0 36 34 99 00	47.2 x 3.5	0 9 06 54 99 90
2"	50 x 9	304.0	0 5 10 32 19 00	31.0	0 0 36 36 99 00	47.2 x 3.5	0 9 06 54 99 90
2"	65 x 8	248.3	0 5 10 30 19 00	47.1	0 0 36 44 99 00	56.7 x 3.5	0 9 06 55 99 90

When selecting the tube dimensions,  
refer to the pressure specifications of  
the tube manufacturer.

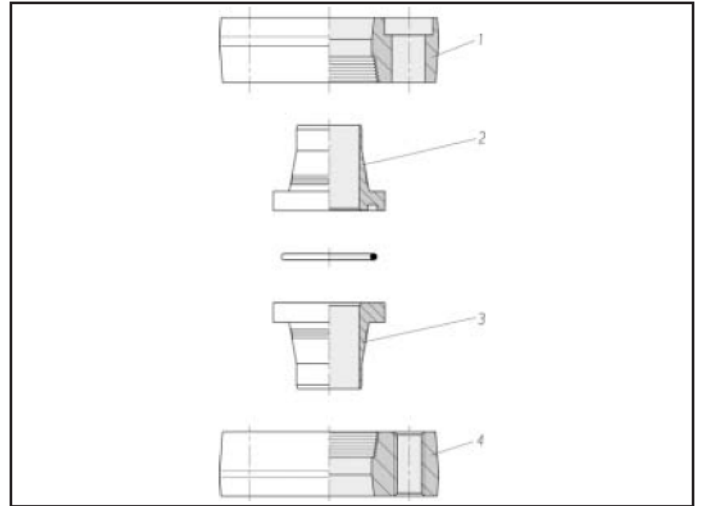
<sup>1)</sup> Complete with O-ring  
(supplied as separate part)

Sample product code, see:  
\* FE-1600-8/6  
\*\* K-1620-8

## Tube-to-tube flange couplings ZAKO system Component parts

Hole pattern according to  
SAE J 518 C / ISO 6162  
High-pressure series  
(6000 psi)

Max. permissible operating  
pressure (PB) 400 bar



Flange size	Tube d1 x s	kg/100 approx.	Order No. Part 1	kg/100 approx.	Order No. Part 2 <sup>1)</sup>	kg/100 approx.	Order No. Part 3	kg/100 approx.	Order No. Part 4
1/2"	16 x 2	26.1	0 5 10 20 19 00**	4.1	0 0 36 00 99 00**	3.3	0 0 36 01 19 00**	28.5	0 5 10 70 19 00**
1/2"	16 x 2.5	26.1	0 5 10 20 19 00	4.1	0 0 36 02 99 00	3.4	0 0 36 03 19 00	28.5	0 5 10 70 19 00
1/2"	16 x 3	26.1	0 5 10 20 19 00	4.1	0 0 36 04 99 00	3.5	0 0 36 05 19 00	28.5	0 5 10 70 19 00
3/4"	20 x 2.5	49.4	0 5 10 21 19 00	6.5	0 0 36 06 99 00	5.3	0 0 36 07 19 00	55.7	0 5 10 71 19 00
3/4"	20 x 3	49.4	0 5 10 21 19 00	6.6	0 0 36 08 99 00	5.7	0 0 36 09 19 00	55.7	0 5 10 71 19 00
3/4"	20 x 3.5	49.4	0 5 10 21 19 00	6.9	0 0 36 10 99 00	5.7	0 0 36 11 19 00	55.7	0 5 10 71 19 00
3/4"	25 x 3	45.5	0 5 10 22 19 00	6.9	0 0 36 12 99 00	5.6	0 0 36 13 19 00	52.6	0 5 10 72 19 00
3/4"	25 x 4	45.5	0 5 10 22 19 00	7.2	0 0 36 14 99 00	5.9	0 0 36 15 19 00	52.6	0 5 10 72 19 00
1"	30 x 4	68.7	0 5 10 23 19 00	10.3	0 0 36 16 99 00	8.8	0 0 36 17 19 00	82.0	0 5 10 73 19 00
1"	30 x 5	68.7	0 5 10 23 19 00	11.5	0 0 36 18 99 00	9.9	0 0 36 19 19 00	82.0	0 5 10 73 19 00
1 1/4"	38 x 4	86.1	0 5 10 25 19 00	14.5	0 0 36 22 99 00	13.9	0 0 36 23 19 00	100.5	0 5 10 75 19 00
1 1/4"	38 x 5	86.1	0 5 10 25 19 00	15.0	0 0 36 24 99 00	13.6	0 0 36 25 19 00	100.5	0 5 10 75 19 00
1 1/4"	38 x 6	86.1	0 5 10 25 19 00	15.1	0 0 36 26 99 00	13.5	0 0 36 27 19 00	100.5	0 5 10 75 19 00
1 1/2"	50 x 5	154.0	0 5 10 28 19 00	28.1	0 0 36 30 99 00	24.9	0 0 36 31 19 00	177.2	0 5 10 76 19 00
1 1/2"	50 x 6	154.0	0 5 10 28 19 00	28.0	0 0 36 32 99 00	24.4	0 0 36 33 19 00	177.2	0 5 10 76 19 00
1 1/2"	50 x 8	154.0	0 5 10 28 19 00	31.3	0 0 36 34 99 00	27.4	0 0 36 35 19 00	177.2	0 5 10 76 19 00
1 1/2"	50 x 9	154.0	0 5 10 28 19 00	31.0	0 0 36 36 99 00	27.1	0 0 36 37 19 00	177.2	0 5 10 76 19 00
2"	65 x 8	230.0	0 5 10 30 19 00	47.1	0 0 36 44 99 00	42.6	0 0 36 45 19 00	253.1	0 5 10 77 19 00

When selecting the tube dimensions,  
refer to the pressure specifications of  
the tube manufacturer.

<sup>1)</sup> Complete with O-ring  
(supplied as separate part)

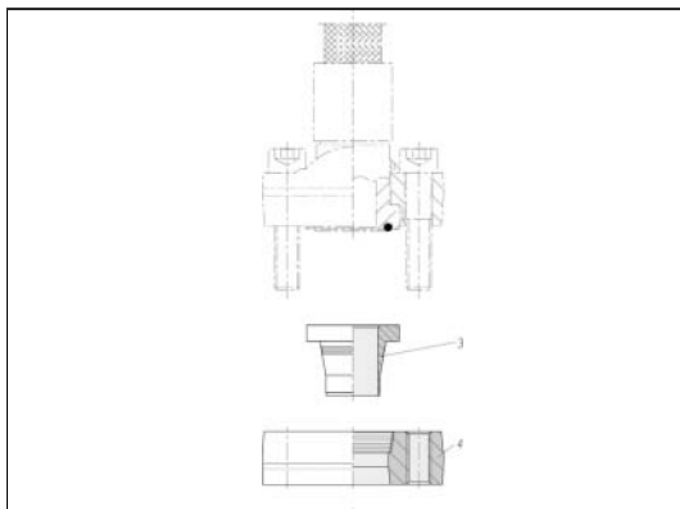
\*\* Sample product code, see:  
(Part 1 to Part 4)  
FE-1600-8/6

K-1620-8  
KO-1620-8  
FV-1600-8/6

## Tube-to-hose flange couplings ZAKO system Component parts

Hole pattern according to  
SAE J 518 C / ISO 6162  
High-pressure series  
(6000 psi)

Max. permissible operating  
pressure (PB) 400 bar



Flange size	Tube d1 x s	kg/100 approx.	Order No. Part 3	kg/100 approx.	Order No. Part 4
1/2"	16 x 2	3.3	0 0 36 01 19 00*	28.5	0 5 10 70 19 00**
1/2"	16 x 2.5	3.4	0 0 36 03 19 00	28.5	0 5 10 70 19 00
1/2"	16 x 3	3.5	0 0 36 05 19 00	28.5	0 5 10 70 19 00
3/4"	20 x 2.5	5.3	0 0 36 07 19 00	55.7	0 5 10 71 19 00
3/4"	20 x 3	5.7	0 0 36 09 19 00	55.7	0 5 10 71 19 00
3/4"	20 x 3.5	5.7	0 0 36 11 19 00	55.7	0 5 10 71 19 00
3/4"	25 x 3	5.6	0 0 36 13 19 00	52.6	0 5 10 72 19 00
3/4"	25 x 4	5.9	0 0 36 15 19 00	52.6	0 5 10 72 19 00
1"	30 x 4	8.8	0 0 36 17 19 00	82.0	0 5 10 73 19 00
1"	30 x 5	9.8	0 0 36 19 19 00	82.0	0 5 10 73 19 00
1"	38 x 5	11.0	0 0 36 21 19 00	70.1	0 5 10 74 19 00
1 1/4"	38 x 4	13.8	0 0 36 23 19 00	100.5	0 5 10 75 19 00
1 1/4"	38 x 5	13.6	0 0 36 25 19 00	100.5	0 5 10 75 19 00
1 1/4"	38 x 6	13.5	0 0 36 27 19 00	100.5	0 5 10 75 19 00
1 1/2"	50 x 6	24.4	0 0 36 33 19 00	177.2	0 5 10 76 19 00
1 1/2"	50 x 8	27.4	0 0 36 35 19 00	177.2	0 5 10 76 19 00
1 1/2"	50 x 9	27.1	0 0 36 37 19 00	177.2	0 5 10 76 19 00
2"	65 x 8	42.6	0 0 36 45 19 00	253.1	0 5 10 77 19 00

When selecting the tube dimensions,  
refer to the pressure specifications of  
the tube manufacturer.

Sample product code, see:

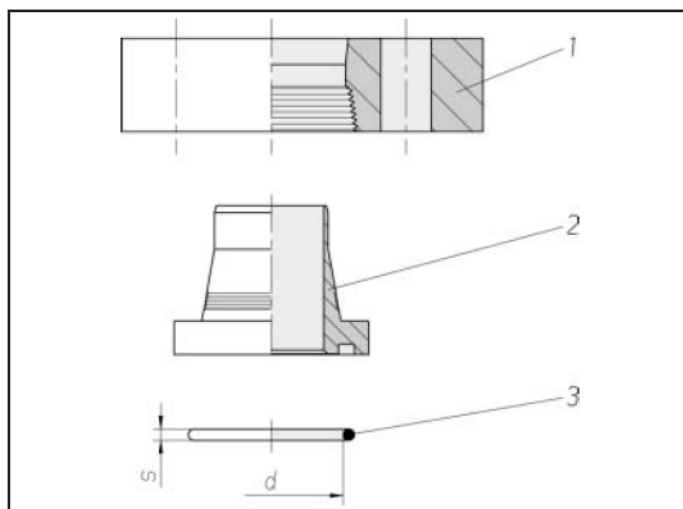
\* KO-1620-8

\*\* FV-1600-8/6

## Tube-to-port flange couplings ZAKO system Component parts

VOSS square  
flange hole pattern  
High-pressure series

Max. permissible operating  
pressure (PB) 400 bar<sup>2)</sup>



Flange size NW	Tube d1 x s	kg/100 approx.	Order No. Part 1	kg/100 approx.	Order No. Part 2 <sup>1)</sup>	O-ring d x s	Order No. Part 3
12	16 x 2	30.6	0 5 11 00 19 00*	4.1	0 0 36 00 99 00**	18.6 x 3.5	0 9 06 74 99 90
11	16 x 2.5	30.6	0 5 11 00 19 00	4.1	0 0 36 02 99 00	18.6 x 3.5	0 9 06 74 99 90
10	16 x 3	30.6	0 5 11 00 19 00	4.1	0 0 36 04 99 00	18.6 x 3.5	0 9 06 74 99 90
15	20 x 2.5	35.2	0 5 11 01 19 00	6.5	0 0 36 06 99 00	25 x 3.5	0 9 06 71 99 90
14	20 x 3	35.2	0 5 11 01 19 00	6.6	0 0 36 08 99 00	25 x 3.5	0 9 06 71 99 90
13	20 x 3.5	35.2	0 5 11 01 19 00	6.9	0 0 36 10 99 00	25 x 3.5	0 9 06 71 99 90
19	25 x 3	45.0	0 5 11 02 19 00	6.9	0 0 36 12 99 00	25 x 3.5	0 9 06 71 99 90
17	25 x 4	45.0	0 5 11 02 19 00	7.3	0 0 36 14 99 00	25 x 3.5	0 9 06 71 99 90
22	30 x 4	54.8	0 5 11 03 19 00	10.3	0 0 36 16 99 00	32.9 x 3.5	0 9 06 72 99 90
20	30 x 5	54.8	0 5 11 03 19 00	11.5	0 0 36 18 99 00	32.9 x 3.5	0 9 06 72 99 90
30	38 x 4	87.7	0 5 11 04 19 00	14.5	0 0 36 22 99 00	37.7 x 3.5	0 9 06 73 99 90
28	38 x 5	87.7	0 5 11 04 19 00	15.0	0 0 36 24 99 00	37.7 x 3.5	0 9 06 73 99 90
26	38 x 6	87.7	0 5 11 04 19 00	15.2	0 0 36 26 99 00	37.7 x 3.5	0 9 06 73 99 90
45	50 x 2.5	129.0	0 5 11 22 19 00	27.6	0 0 36 28 99 00	47.2 x 3.5	0 9 06 54 99 90
40	50 x 5	129.0	0 5 11 22 19 00	28.1	0 0 36 30 99 00	47.2 x 3.5	0 9 06 54 99 90
38	50 x 6	129.0	0 5 11 22 19 00	28.1	0 0 36 32 99 00	47.2 x 3.5	0 9 06 54 99 90
34	50 x 8	129.0	0 5 11 22 19 00	31.3	0 0 36 34 99 00	47.2 x 3.5	0 9 06 54 99 90
32	50 x 9	129.0	0 5 11 22 19 00	31.5	0 0 36 36 99 00	47.2 x 3.5	0 9 06 54 99 90
45	50 x 2.5	207.7	0 5 11 05 19 00	27.6	0 0 36 28 99 00	47.2 x 3.5	0 9 06 54 99 90
40	50 x 5	207.7	0 5 11 05 19 00	28.1	0 0 36 30 99 00	47.2 x 3.5	0 9 06 54 99 90
38	50 x 6	207.7	0 5 11 05 19 00	28.1	0 0 36 32 99 00	47.2 x 3.5	0 9 06 54 99 90
34	50 x 8	207.7	0 5 11 05 19 00	31.3	0 0 36 34 99 00	47.2 x 3.5	0 9 06 54 99 90
32	50 x 9	207.7	0 5 11 05 19 00	31.5	0 0 36 36 99 00	47.2 x 3.5	0 9 06 54 99 90

Continuation on page 254

When selecting the tube dimensions, refer to the pressure specifications of the tube manufacturer.

<sup>2)</sup> According to the ASME Code, a reduced operating pressure applies for the flange size NW 40  
Order No.: 0 5 11 25 19 00

<sup>1)</sup> Complete with O-ring (supplied as separate part)

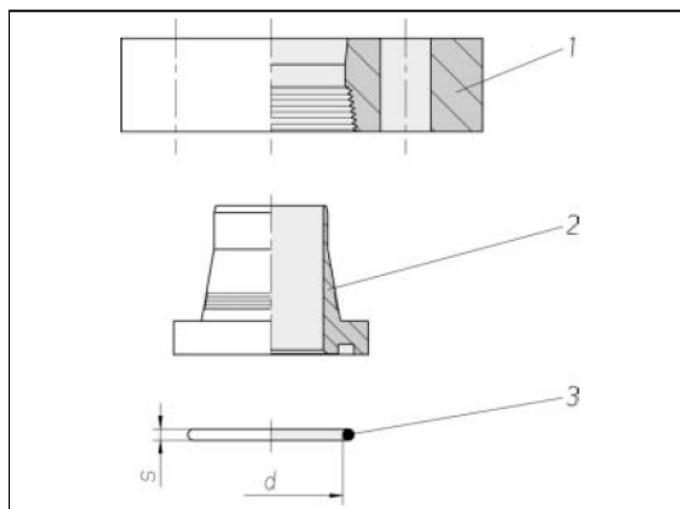
Sample product code, see:  
\* FE-1600  
\*\* K-1620-8



# Tube-to-port flange couplings ZAKO system Component parts

VOSS square  
flange hole pattern  
High-pressure series

Max. permissible operating  
pressure (PB) 400 bar<sup>2)</sup>



Flange size NW	Tube d1 x s	kg/100 approx.	Order No. Part 1	kg/100 approx.	Order No. Part 2 <sup>1)</sup>	O-ring d x s	Order No. Part 3
54	60 x 3	182.2	0 5 11 23 19 00*	43.9	0 0 36 52 99 00**	56.7 x 3.5	0 9 06 55 99 90
50	60 x 5	182.2	0 5 11 23 19 00	50.0	0 0 36 58 99 00	56.7 x 3.5	0 9 06 55 99 90
40	60 x 10	182.2	0 5 11 23 19 00	47.1	0 0 36 54 99 00	56.7 x 3.5	0 9 06 55 99 90
40	60 x 10	383.7	0 5 11 25 19 00	88.7	0 0 36 81 99 00	60 x 5	0 9 01 09 99 90
49	65 x 8	280.2	0 5 11 06 19 00	47.1	0 0 36 44 99 00	56.7 x 3.5	0 9 06 55 99 90
50	75 x 12.5	307.0	0 5 11 08 19 00	99.0	0 0 36 62 99 00	60 x 5	0 9 01 09 99 90
74	80 x 3	552.0	0 5 11 07 19 00	86.9	0 0 36 48 99 00	85.3 x 3.5	0 9 06 85 99 90
64	80 x 8	552.0	0 5 11 07 19 00	128.1	0 0 36 56 99 00	75 x 5	0 9 07 66 99 90
60	80 x 10	552.0	0 5 11 07 19 00	126.3	0 0 36 50 99 00	75 x 5	0 9 07 66 99 90
60	88 x 14	576.0	0 5 11 09 19 00	158.0	0 0 36 64 99 00	75 x 5	0 9 07 66 99 90
50	75 x 12.5	584.0	0 5 11 24 19 00	150.0	0 0 36 80 99 00	75 x 5	0 9 07 66 99 90
70	101.6 x 16	648.0	0 5 11 13 19 00	172.0	0 0 36 86 99 00	80 x 5	0 9 01 13 99 90
80	114.3 x 17.5	760.0	0 5 11 41 19 00	260.0	0 0 36 98 99 00	95 x 5	0 9 01 12 99 90
80	120 x 20	725.8	0 5 11 11 19 00	260.0	0 0 36 84 99 00	95 x 5	0 9 01 12 99 90

When selecting the tube dimensions,  
refer to the pressure specifications of  
the tube manufacturer.

<sup>2)</sup> According to the ASME Code,  
a reduced operating pressure  
applies for the flange size NW 40  
Order No.: 0 5 11 25 19 00

<sup>1)</sup> Complete with O-ring  
(supplied as separate part)

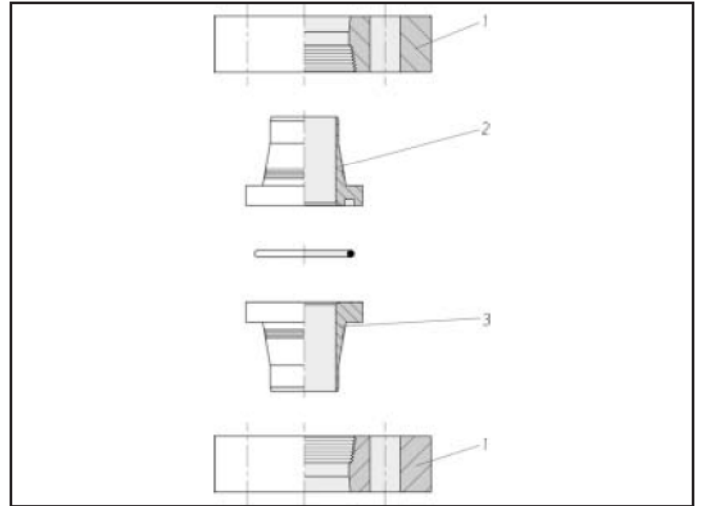
Sample product code, see:  
\* FE-6000  
\*\* K-6030-8



## Tube-to-tube flange couplings ZAKO system Component parts

VOSS square  
flange hole pattern  
High-pressure series

Max. permissible operating  
pressure (PB) 400 bar



Flange size NW	Tube d1 x s	kg/100 approx.	Order No. Part 1 <sup>2)</sup>	kg/100 approx.	Order No. Part 2 <sup>1)</sup>	kg/100 approx.	Order No. Part 3
12	16 x 2	30.6	0 5 11 00 19 00*	4.1	0 0 36 00 99 00*	3.3	0 0 36 01 19 00*
11	16 x 2.5	30.6	0 5 11 00 19 00	4.1	0 0 36 02 99 00	3.4	0 0 36 03 19 00
10	16 x 3	30.6	0 5 11 00 19 00	4.1	0 0 36 04 99 00	3.5	0 0 36 05 19 00
15	20 x 2.5	35.2	0 5 11 01 19 00	6.5	0 0 36 06 99 00	5.3	0 0 36 07 19 00
14	20 x 3	35.2	0 5 11 01 19 00	6.6	0 0 36 08 99 00	5.7	0 0 36 09 19 00
13	20 x 3.5	35.2	0 5 11 01 19 00	6.9	0 0 36 10 99 00	5.7	0 0 36 11 19 00
19	25 x 3	45.0	0 5 11 02 19 00	6.9	0 0 36 12 99 00	5.6	0 0 36 13 19 00
17	25 x 4	45.0	0 5 11 02 19 00	7.3	0 0 36 14 99 00	5.9	0 0 36 15 19 00
22	30 x 4	54.8	0 5 11 03 19 00	10.3	0 0 36 16 99 00	8.8	0 0 36 17 19 00
20	30 x 5	54.8	0 5 11 03 19 00	11.5	0 0 36 18 99 00	9.8	0 0 36 19 19 00
30	38 x 4	87.7	0 5 11 04 19 00	14.5	0 0 36 22 99 00	13.9	0 0 36 23 19 00
28	38 x 5	87.7	0 5 11 04 19 00	15.0	0 0 36 24 99 00	13.7	0 0 36 25 19 00
26	38 x 6	87.7	0 5 11 04 19 00	15.2	0 0 36 26 99 00	13.6	0 0 36 27 19 00
45	50 x 2.5	129.0	0 5 11 22 19 00	27.6	0 0 36 28 99 00	24.9	0 0 36 29 19 00
40	50 x 5	129.0	0 5 11 22 19 00	28.1	0 0 36 30 99 00	24.9	0 0 36 31 19 00
38	50 x 6	129.0	0 5 11 22 19 00	28.1	0 0 36 32 99 00	24.4	0 0 36 33 19 00
34	50 x 8	129.0	0 5 11 22 19 00	31.3	0 0 36 34 99 00	27.4	0 0 36 35 19 00
32	50 x 9	129.0	0 5 11 22 19 00	31.5	0 0 36 36 99 00	27.6	0 0 36 37 19 00
45	50 x 2.5	207.7	0 5 11 05 19 00*	27.6	0 0 36 28 99 00	24.9	0 0 36 29 19 00
40	50 x 5	207.7	0 5 11 05 19 00	28.1	0 0 36 30 99 00	24.9	0 0 36 31 19 00
38	50 x 6	207.7	0 5 11 05 19 00	28.1	0 0 36 32 99 00	24.4	0 0 36 33 19 00
34	50 x 8	207.7	0 5 11 05 19 00	31.3	0 0 36 34 99 00	27.4	0 0 36 35 19 00
32	50 x 9	207.7	0 5 11 05 19 00	31.5	0 0 36 36 99 00	27.6	0 0 36 37 19 00

Continuation on page 256

When selecting the tube dimensions,  
refer to the pressure specifications of  
the tube manufacturer.

<sup>1)</sup> Complete with O-ring  
(supplied as separate part)

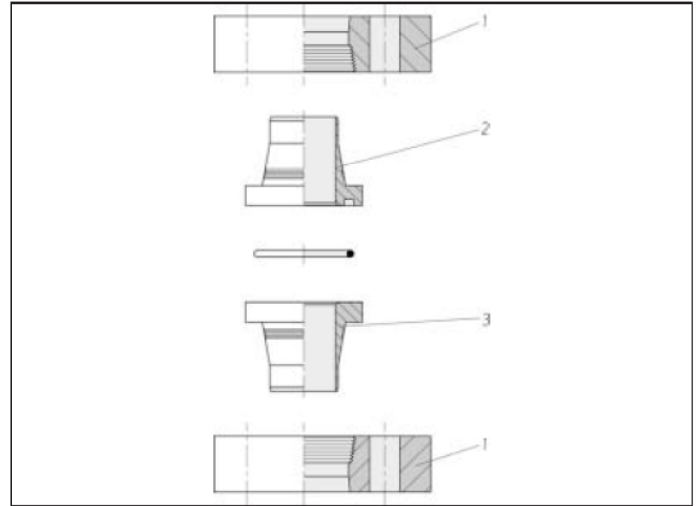
<sup>2)</sup> 2 each per tube-to-tube flange  
coupling

Sample product code, see:  
\* FE-1600  
K-1620-8  
KO-1620-8

# Tube-to-tube flange couplings ZAKO system Component parts

VOSS square  
flange hole pattern  
High-pressure series

Max. permissible operating  
pressure (PB) 400 bar



Flange size NW	Tube d1 x s	kg/100 approx.	Order No. Part 1 <sup>2)</sup>	kg/100 approx.	Order No. Part 2 <sup>1)</sup>	kg/100 approx.	Order No. Part 3
54	60 x 3	182.2	0 5 11 23 19 00*	43.9	0 0 36 52 99 00*	40.0	0 0 36 53 19 00*
50	60 x 5	182.2	0 5 11 23 19 00	50.0	0 0 36 58 99 00	51.0	0 0 36 59 19 00
40	60 x 10	182.2	0 5 11 23 19 00	47.5	0 0 36 54 99 00	40.0	0 0 36 55 19 00
49	65 x 8	280.2	0 5 11 06 19 00	47.1	0 0 36 44 99 00	42.6	0 0 36 45 19 00
50	75 x 12.5	307.0	0 5 11 08 19 00	99.0	0 0 36 62 99 00	94.0	0 0 36 63 19 00
74	80 x 3	552.0	0 5 11 07 19 00	86.9	0 0 36 48 99 00	79.8	0 0 36 49 19 00
64	80 x 8	552.0	0 5 11 07 19 00	128.1	0 0 36 56 99 00	122.3	0 0 36 57 19 00
60	80 x 10	552.0	0 5 11 07 19 00	126.3	0 0 36 50 99 00	120.1	0 0 36 51 19 00
60	88 x 14	576.0	0 5 11 09 19 00	158.0	0 0 36 64 99 00	154.0	0 0 36 65 19 00
70	101.6 x 16	400.0	0 5 11 13 19 00	172.0	0 0 36 86 99 00	154.0	0 0 36 87 19 00
70	101.6 x 16	420.0	0 5 11 14 19 00	–	–	–	–
80	114.3 x 17.5	772.5	0 5 11 41 19 00	260.0	0 0 36 98 99 00	230.0	0 0 36 99 19 00
80	120 x 20	725.8	0 5 11 11 19 00	260.0	0 0 36 84 99 00	230.0	0 0 36 83 19 00
80	120 x 20	759.5	0 5 11 12 19 00	–	–	–	–

When selecting the tube dimensions,  
refer to the pressure specifications of  
the tube manufacturer.

<sup>1)</sup> Complete with O-ring  
(supplied as separate part)

<sup>2)</sup> 2 each per tube-to-tube flange  
coupling

Sample product code, see:  
\* FE-6000  
K-6030-8  
KO-6030-8

