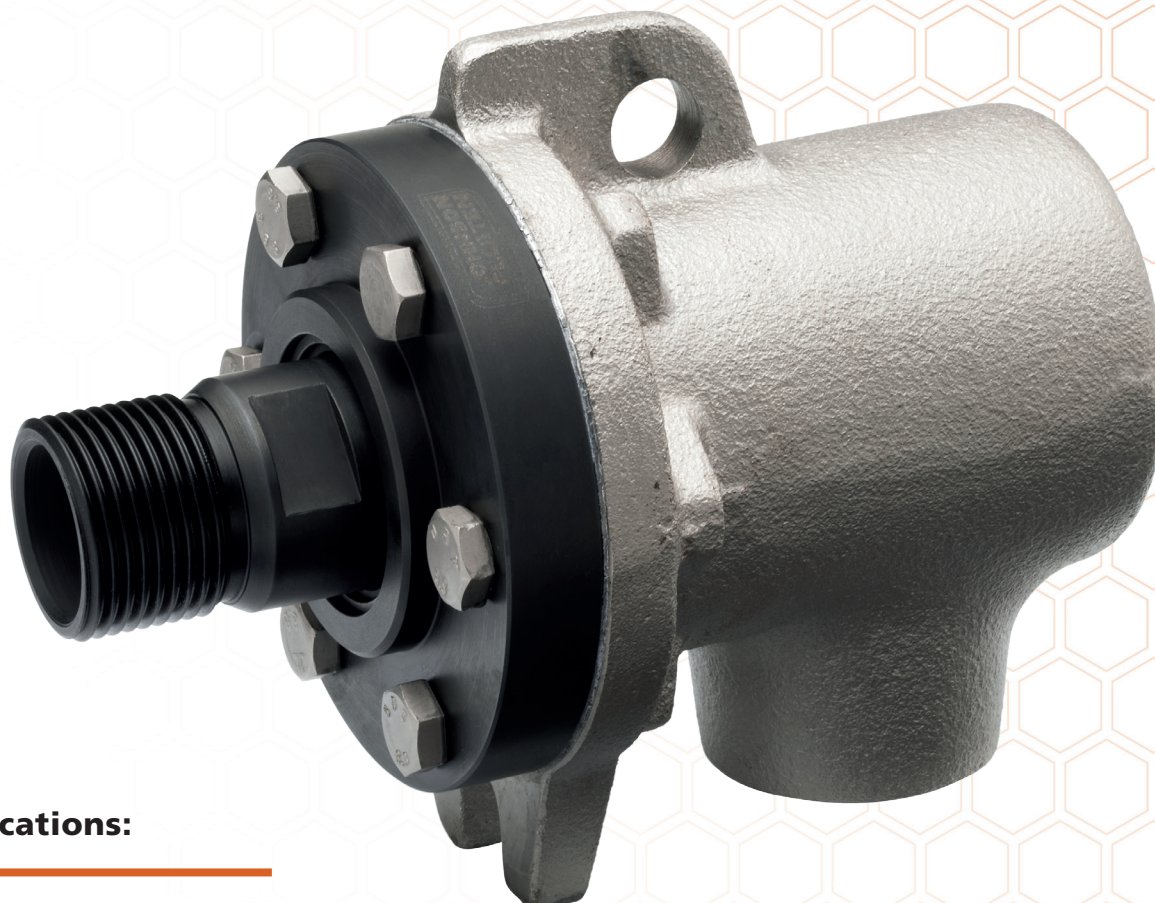




# Rotary Unions

# Type Z®



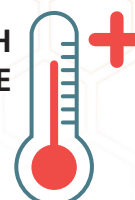
## Applications:

Chemical  
Pharmaceutical  
Plastic & Rubber  
Food & Beverages  
Printing/Converting/Flexo



Thermal Oil

HIGH  
TEMPERATURE



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## Type Z Rotary Union Overview

- Temperature MAX: 300°
- Media: Thermal Oil
- Speed MAX: 500 RPM

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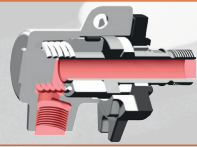
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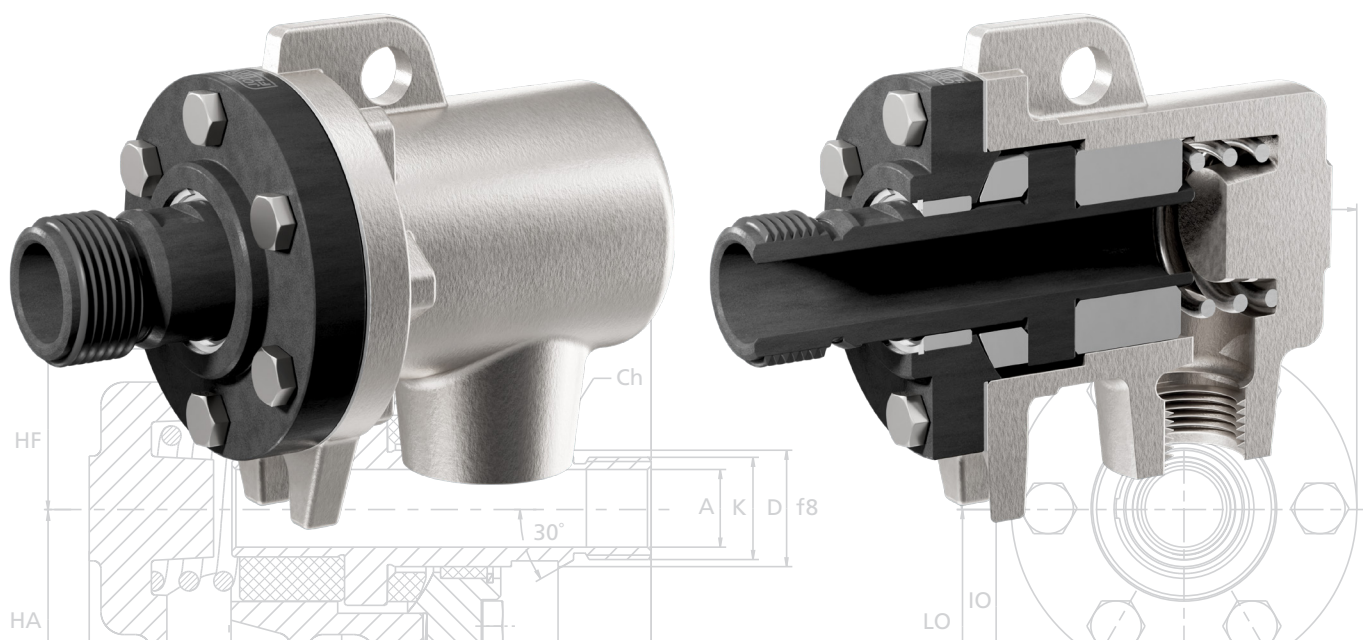
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# Overview

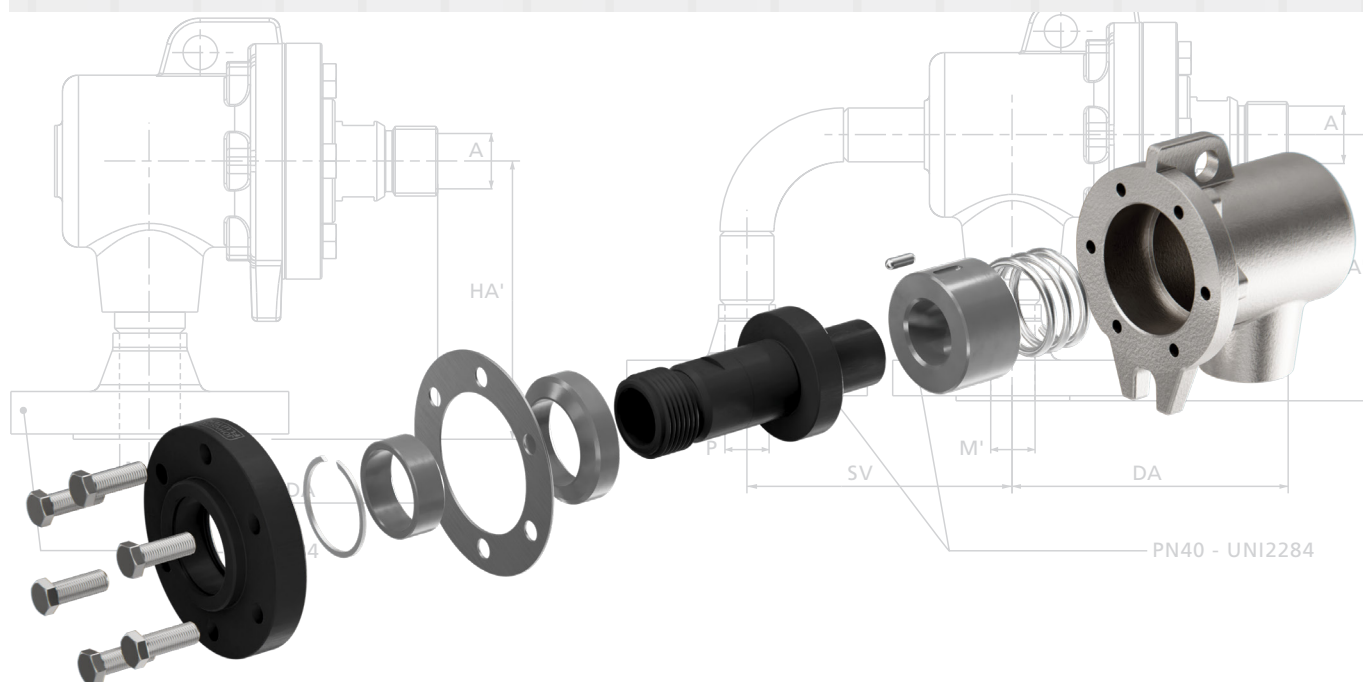


## Features

Type Z rotary unions are designed for thermal oil applications. The union is supported by two internal carbon guides (bearings) and can run up to 500 RPM and 300°C.

The proprietary antimony impregnated carbon seal ring is in compression sealing against the stainless steel nipple and seal plate. This seal package combination provides for a long-lasting and low maintenance rotary union.

The type Z rotary union is available in sizes from 3/4" to 2 1/2" with both flanged and threaded connections.

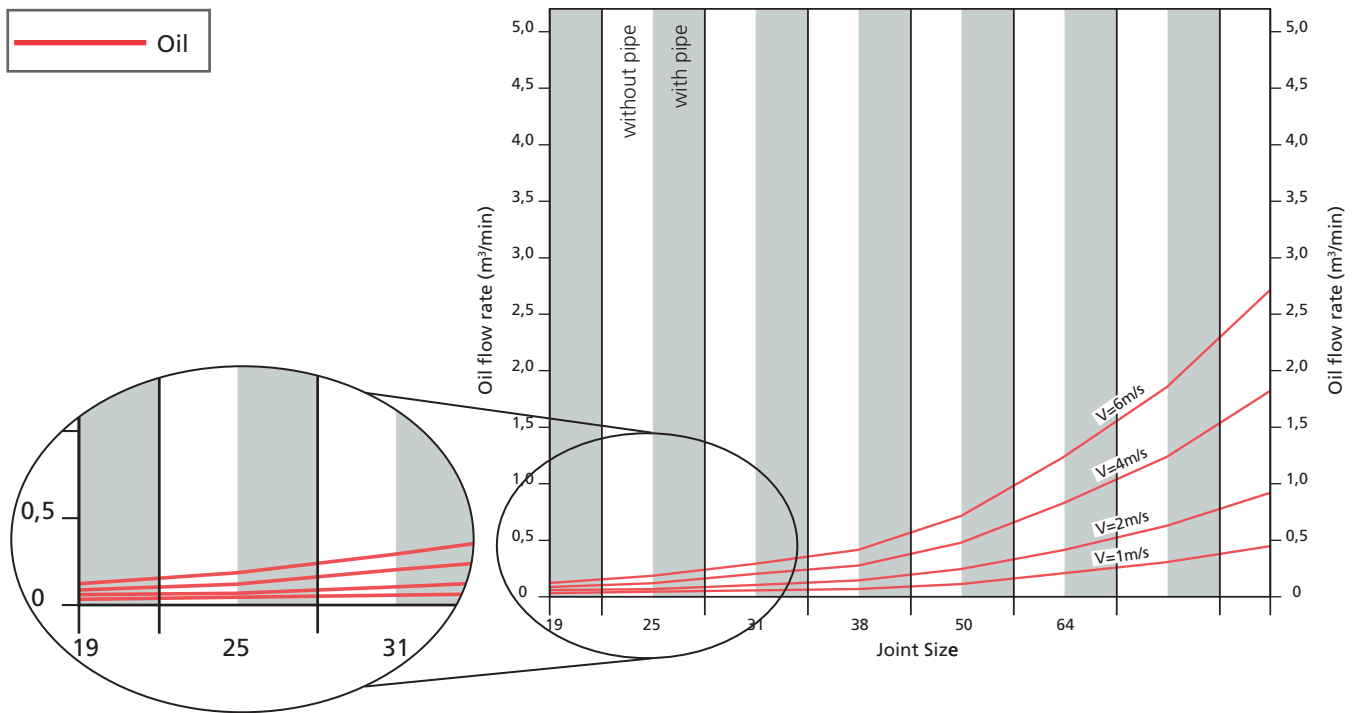


*Type Z rotary unions are designed for high temperature thermal oil applications.*

## Operating Parameters

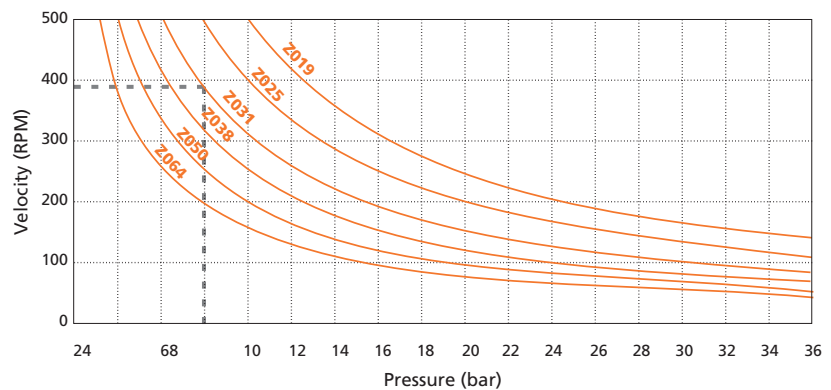
Sizes:	3/4" to 2 1/2"
Pressure:	Up to 35 bar
Temperature:	Up to 300°C
Speed:	Up to 500 RPM (see curves below)

## Flow Rates

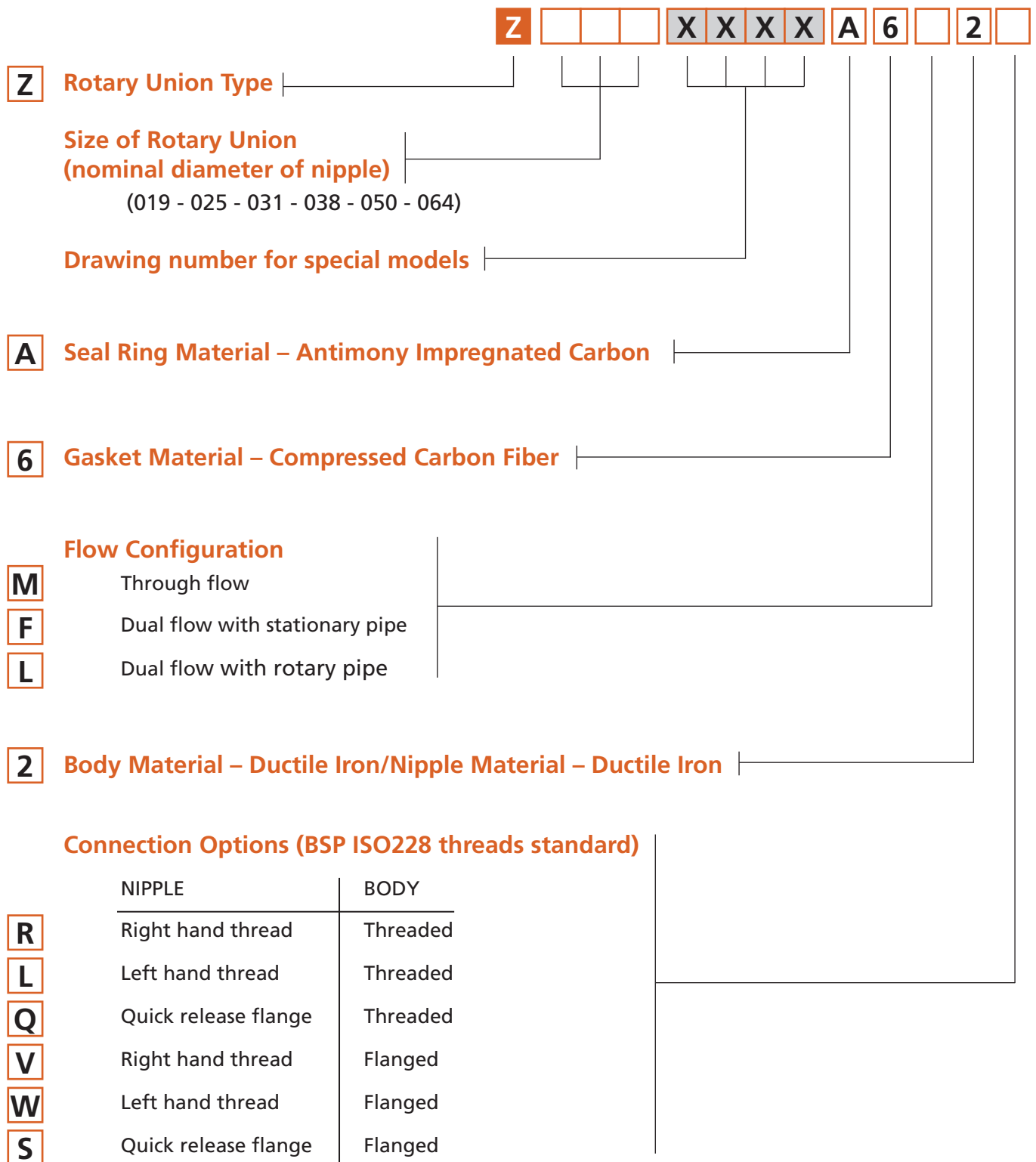


For different flow values  $V_x$  apply the formula:  $Q_x = Q_{25} * V_x/25$

## Pressure-Velocity (PV) Curves



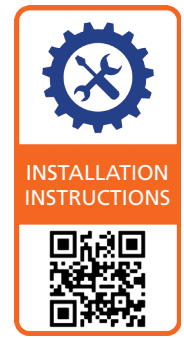
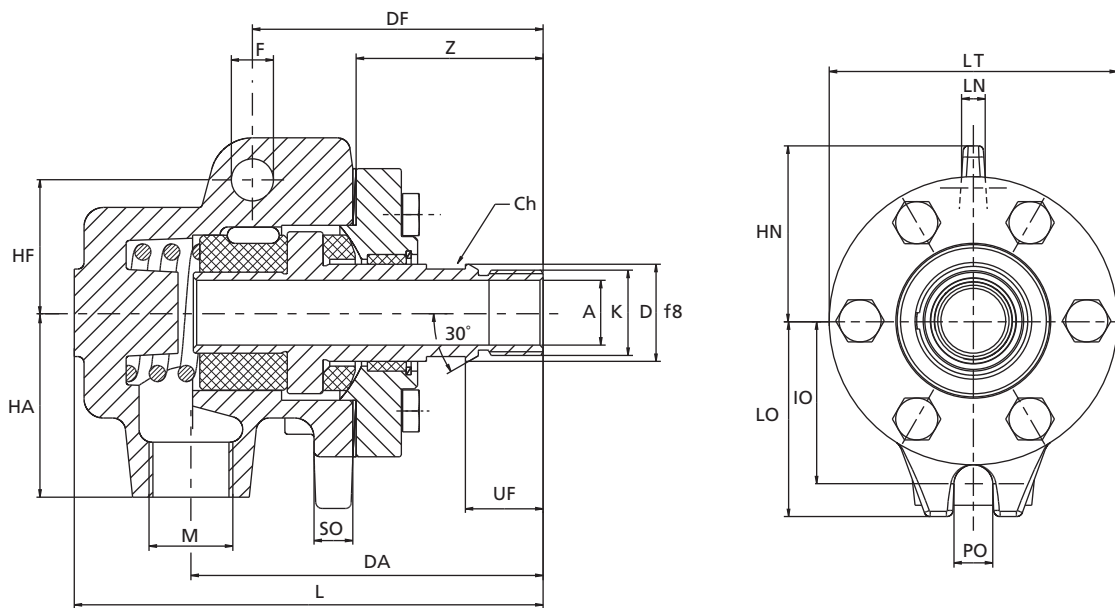
# Ordering Information and Specifications



## EXAMPLES

- Z031A6F2L 1¼" Rotary Union, Dual Flow for Stationary Pipe, Threaded Body, LH Threaded Nipple
- Z031A6F2R 1¼" Rotary Union, Dual Flow for Stationary Pipe, Threaded Body, RH Threaded Nipple

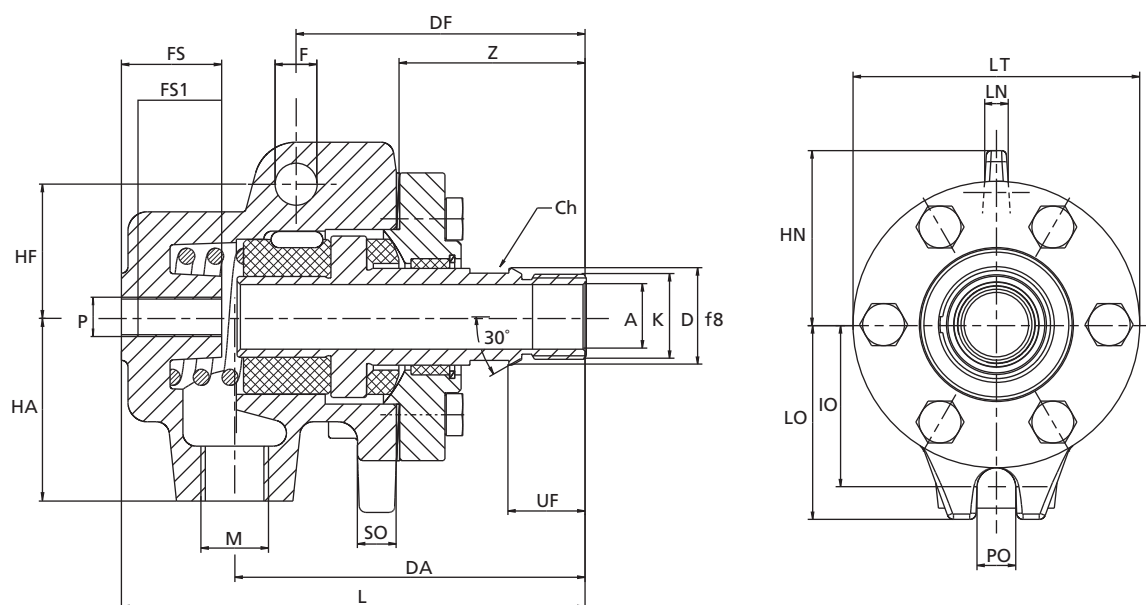
# Through flow rotary union



Z	019	025	031	038	050	064
K ISO228/1	G 3/4 A	G 1 A	G 1 1/4 A	G 1 1/2 A	G 2 A	G 2 1/2 A
RH	Z019008000	Z025008001	Z031008002	Z038008003	Z050008004	Z064008005
LH	Z019008010	Z025008011	Z031008012	Z038008013	Z050008014	Z064008015
Q	Z019008020	Z025008021	Z031008022	Z038008023	Z050008024	Z064008025
M ISO228/1	G	3/4	G	1	G	1 1/4
A	20	25	32	38	50	66
L	145	172	200,5	222	272	316
DA	109	132	153,5	170	204	234
DF	90	98	108,5	120	144	169
LT	89	98	115	125	145	185
D	30	35	45	52	65	85
HF	41	45	55	60	72	85
HA	57	63	75	85	100	125
Z	59	66	75,5	80	99	109
HN	54	60	72	77	94	105
F	13	15	16	17	18	20
LN	8	9	12	11	12,5	15
UF	23	28	34	37	43	48
Ch	27	30	41	46	60	75
LO	60,5	68	77,5	85,5	101,5	121
PO	12	14	16	16	18	20
SO	12	12	15	17	17	18
IO	50,5	56	65,5	70,5	81,5	101

CF = Consult Factory

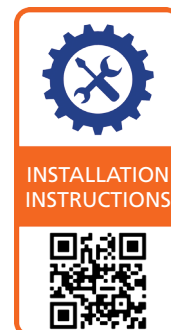
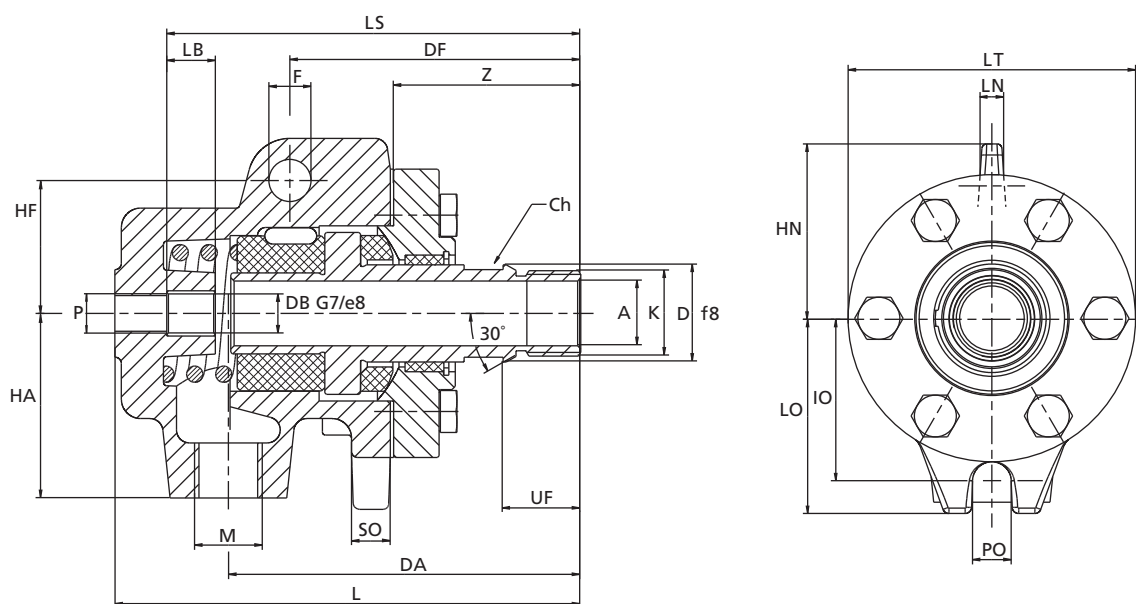
# Dual flow rotary union, stationary pipe



Z	019	025	031	038	050	064
K ISO228/1	G 3/4 A	G 1 A	G 1 1/4 A	G 1 1/2 A	G 2 A	G 2 1/2 A
RH	Z019008040	Z025008041	Z031008042	Z038008043	Z050008044	Z064008045
LH	Z019008050	Z025008051	Z031008052	Z038008053	Z050008054	Z064008055
Q	Z019008060	Z025008061	Z031008062	Z038008063	Z050008064	Z064008065
M ISO228/1	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2
P ISO228/1	G 1/4	G 3/8	G 1/2	G 3/4	G 1	G 1 1/2
A	20	25	32	38	50	66
L	145	172	200,5	222	272	316
DA	109	132	153,5	170	204	234
DF	90	98	108,5	120	144	169
LT	89	98	115	125	145	185
D	30	35	45	52	65	85
HF	41	45	55	60	72	85
HA	57	63	75	85	100	125
Z	59	66	75,5	80	99	118
HN	54	60	72	77	94	105
F	13	15	16	17	18	20
LN	8	9	12	11	12,5	15
UF	23	28	34	37	43	48
FS	31	33	44	49	59	70
Ch	27	30	41	46	60	75
LO	60,5	68	77,5	85,5	101,5	121
PO	12	14	16	16	18	20
SO	12	12	15	17	17	18
IO	50,5	56	65,5	70,5	81,5	101
FSI	19	21	24	34	39	45

CF = Consult Factory

# Dual flow rotary union, rotary pipe

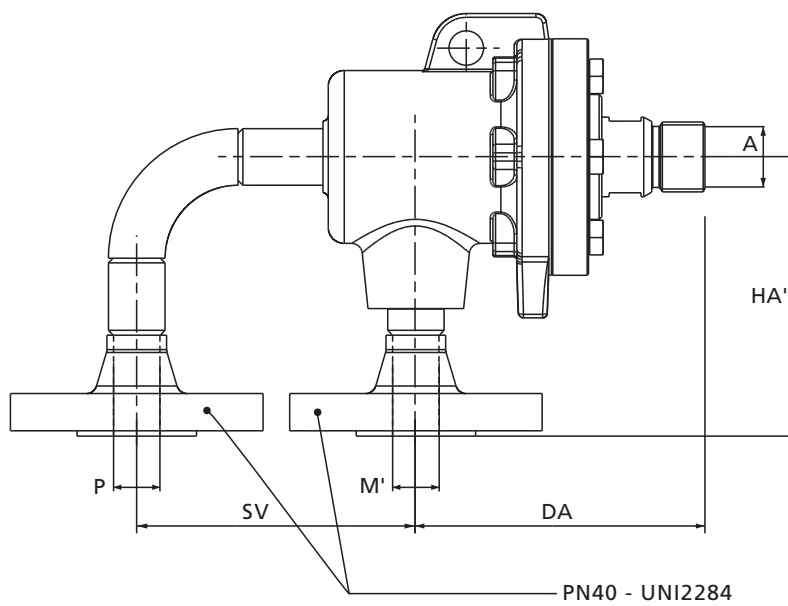
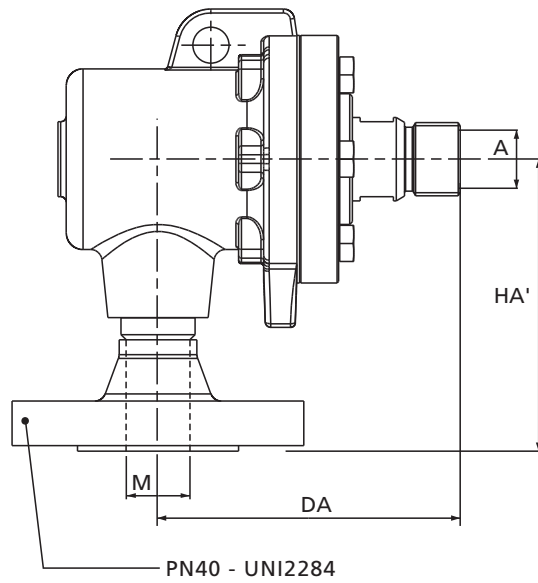


Z	019	025	031	038	050	064
K ISO228/1	G 3/4 A	G 1 A	G 1 1/4 A	G 1 1/2 A	G 2 A	G 2 1/2 A
RH	Z019008080	Z025008081	Z031008082	Z038008083	Z050008084	Z064008085
LH	Z019008090	Z025008091	Z031008092	Z038008093	Z050008094	Z064008095
Q	Z019008100	Z025008101	Z031008102	Z038008103	Z050008104	Z064008105
M ISO228/1	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2
P ISO228/1	G 1/4	G 3/8	G 1/2	G 3/4	G 1	G 1 1/2
A	20	25	32	38	50	66
L	145	172	200,5	222	272	316
DA	109	132	153,5	170	204	234
DF	90	98	108,5	120	144	169
LT	89	98	115	125	145	185
D	30	35	45	52	65	85
HF	41	45	55	60	72	85
HA	57	63	75	85	100	125
Z	59	66	75,5	80	99	109
HN	54	60	72	77	94	105
F	13	15	16	17	18	20
LN	8	9	12	11	12,5	15
UF	23	28	34	37	43	48
DB	12	16	20	25	32	45
LB	15	15	15	25	25	30
LS	128	153	170,5	197	237	276
Ch	27	30	41	46	60	75
LO	60,5	68	77,5	85,5	101,5	121
PO	12	14	16	16	18	20
SO	12	12	15	17	17	18
IO	50,5	56	65,5	70,5	81,5	101

CF = Consult Factory

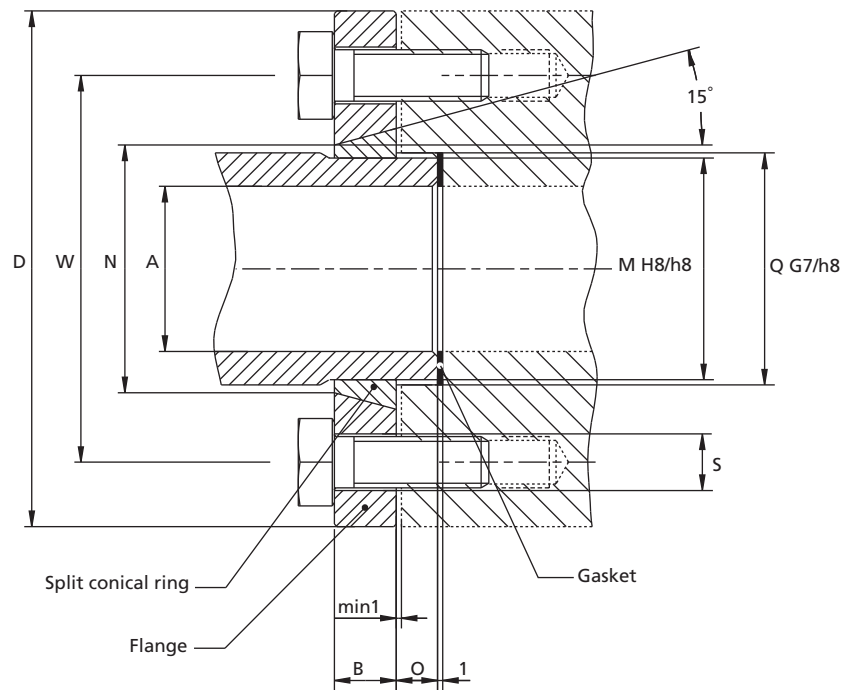


# Flanged connections



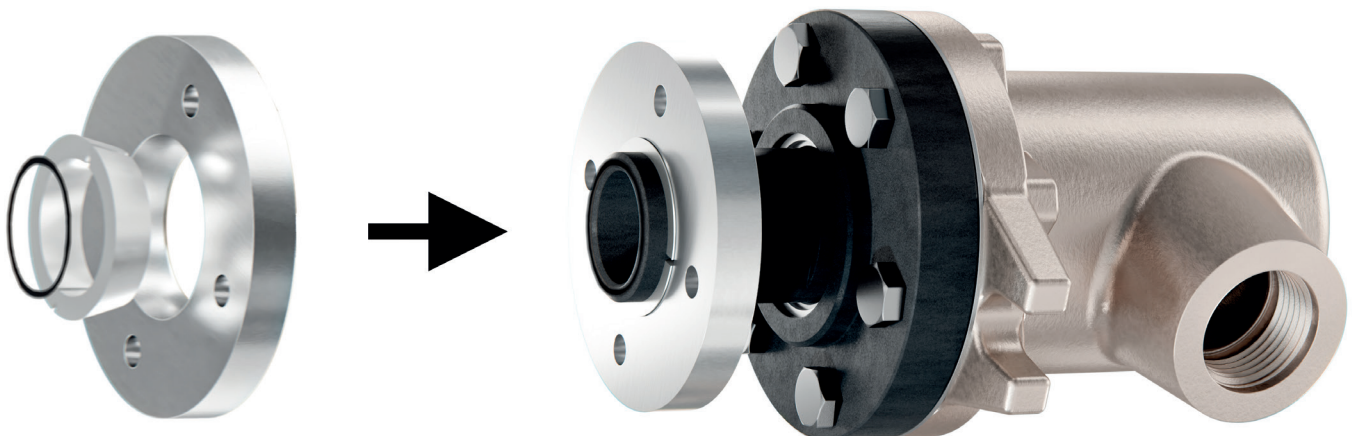
Z	019	025	031	038	050	064
A	20	25	32	38	50	66
M	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65
M'	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
P	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
DA	109	132	153,5	170	204	234
HA'	105	113	125	145	160	195
SV	105	110	125	150	160	180

# Quick Release Nipple Flange

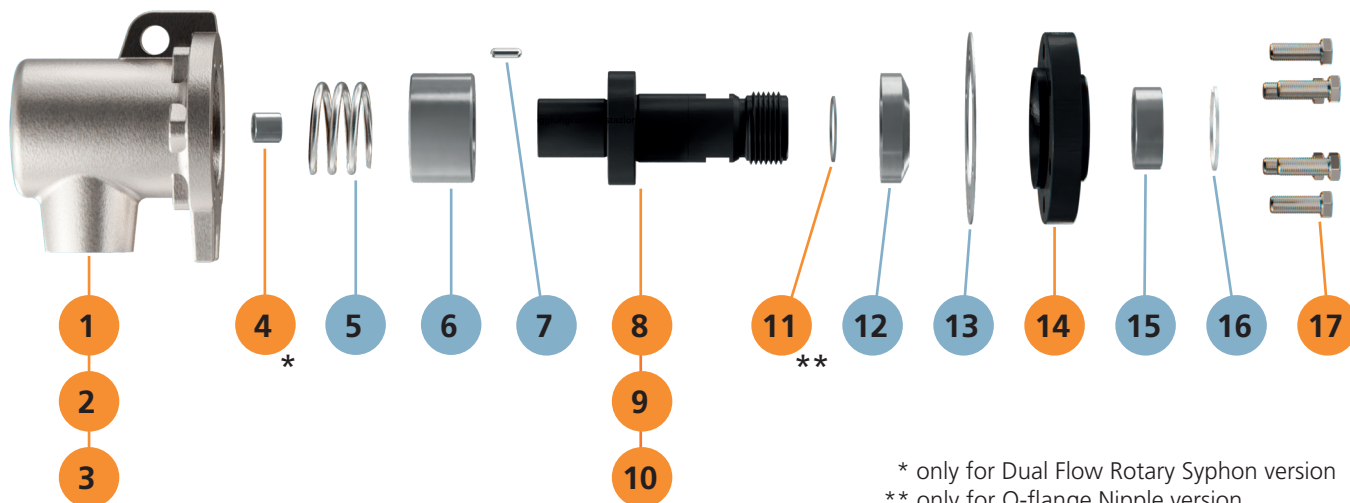


Z	019	025	031	038	050	064
A	20	25	32	38	50	66
Q	30	35	45	50	65	85
M	28	33	43	48	63	82
N	32	37	48	53	69	89
O	8	8	8	10	10	10
D	75	80	100	105	130	150
W	55	60	75	80	100	120
B	12	12	12	15	15	15
S	9	9	11	11	14	14
Bolt Size	M8	M8	M10	M10	M12	M12
No. of Holes	4	4	4	4	4	4

Enter the special code /5195 in the union description for a Kadant Johnson interchangeable Q-nipple.



# Replacement Parts



\* only for Dual Flow Rotary Syphon version  
 \*\* only for Q-flange Nipple version

Parts						
Z	019	025	031	038	050	064
1 Single Flow body, threaded	4982019R2	4982025R2	4982031R2	4982038R2	4982050R2	4982064R2
2 Dual Flow body, threaded, stat pipe	4983019R2	4983025R2	4983031R2	4983038R2	4983050R2	4983064R2
3 Dual Flow body, threaded, rotary pipe	4984019R2	4984025R2	4984031R2	4984038R2	4984050R2	4984064R2
4 Bushing	4987019B1	4987025B1	4987031B1	4987038B1	4987050B1	4987064B1
8 Nipple, RH thread	4990019Y	4990025Y	4990031Y	4990038Y	4990050Y	4990064Y
9 Nipple, LH thread	4991019Y	4991025Y	4991031Y	4991038Y	4991050Y	4991064Y
10 Nipple, Q-ange	4992019Y	4992025Y	4992031Y	4992038Y	4992050Y	4992064Y
11 Nipple gasket	4993019A3	4993025A3	4993031A3	4993038A3	4993050A3	4993064A3
14 Seal plate	4999019Y	4999025Y	4999031Y	4999038Y	4999050Y	4999064Y
17 Cap screws	V100009209W4	V100009209W4	V100009249W4	V100009249W4	V100009289W4	V100009292W4

Note: All threads are BSP ISO228.

Kit						
Z	019	025	031	038	050	064
Kit	KZ019033370	KZ025033371	KZ031033372	KZ038033373	KZ050033374	KZ064033375

KIT parts:

- 5 - Spring
- 6 - Graphite bearing
- 7 - Blocking pin
- 12 - Graphite seal
- 13 - Flat gasket
- 15 - Bushing Bearing
- 16 - Seeger

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