

Rotary Joints

Series DP



Rotary Joints Series DP

DP rotary joints are suitable for:

- hot and cold water
- modified design -800 for thermal oil
- Small Series also for hydraulic oil and compressed air
- high speeds possible due to low frictional torque
- can be delivered with Atex certification

DP is available in four variants:

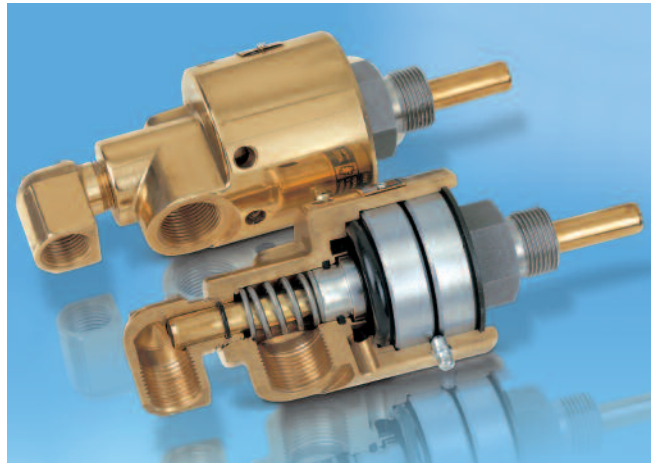
- DP 06, the Small Series, page 11
- DP 10 up to 50 with variation -800, page 6 to 10
- DP 65 up to 100, the Large Series, page 12 to 15
- DPN, the Stainless Steel Series, page 16 to 18

The Standard Series DP 10-50

- Other advantages
 - low frictional torque (important for plastic foil production)
 - long service life
 - easy field repair and maintenance.
- Both housing and elbow are made of brass and are beadblasted without harm to the environment. The bearings are protected by 5 drain holes in the housing.
- Chrome steel rotor.
- Two ball bearings, factory-lubricated, maintenance-free up to 80° C; for higher temperatures relubrication through easily accessible grease point required.
- The internal mechanical seal is balanced and can be easily replaced with other sealing combinations. Combination 1 suitable for water up to 80° C, 3 for water and thermal oil up to 160° C, 4 recommended for contaminated water, 5 for air.
- Series -800 for thermal oil, equipped with heat-stabilised ball bearings, Viton O-rings and axial shaft seal for additional bearing protection.
- Connection to rotating pressure system by means of
 - standardised connection pieces with right-hand or left-hand male thread G/BSP (ISO 228) or NPT (ANSI)
 - sealing and centring face for gasket at end of thread
 - K-flange and conical inner ring (DN 40 and larger)
 - fixed flange (F / DN 40 and larger), sealing with groove and O-ring.
- Radial housing connection with right-hand thread G/BSP (ISO 228) or NPT (ANSI), axial with right-hand thread NPT (ANSI) and screw plug. For series

-800 radial and axial housing connections with right-hand thread G/BSP (ISO 228). Axial thread with screw plug and gasket.

- Due to the low frictional moment anti-rotational devices are not required.



Elbows

DP Rotary Joints are supplied as one way flow unions which can be converted to two way flow unions by using elbows:

- P 2 ... for non-rotating inner pipe (with thread)
- PR 2 ... for rotating inner pipe (directly located in elbow)
- PO 2 ... for non-rotating inner pipe, which floats within the elbow and O-ring, anti-rotational protection by means of screw. Inner pipes for type PO2 are available.
- PO 2 ... -800 as PO 2, but with Viton O-ring for sealing between elbow and housing.

Drain Plug and Hose Coupling for drain holes

In dusty environment we recommend to block the drain holes with plugs to protect the seal. A drain hose coupling for a 6 mm pipe shall be connected to the 6 o'clock position drain hole.

1 set (art.no.1190345) =

4 drain plugs +
1 hose coupling,
suitable for all
sizes.



The Large Series DP 65-100

- The advantages of low frictional torque have been maintained. High speeds are possible, too.
- Balanced mechanical seal. The springs are situated outside of the medium flow.
- Housing made of lacquered steel. For perfectly fitting cross sections we offer 3 types of housings: for one way flow, two way flow, non-rotating and rotating inner pipe. The inner pipes are supported in the housing, no elbow required.
- Bearings are factory-lubricated, lubrication point easily accessible.
- Connection to the rotating pressure system same as Standard Series. Sealing with groove and O-ring.
- Radial and axial housing connection with right-hand female thread as per G/BSP (ISO 228) or NPT (ANSI).
- Anti-rotation device despite low torque to protect the hoses.
- Set of drain plugs fits Large Series as well.
- All other technical features same as Standard Series.



The Stainless Steel Series DPN

- The design of series DPN corresponds to that of the Standard Series. DPN is suitable for applications in the food industry or for aggressive media or area. The standard design is made of 430F (1.4104) steel. For demanding applications a modified design type -100 is available in 316Ti (1.4571).
- One way flow design is available with radial (1B) or axial (1C) connection. The two way flow design is available for non-rotating (2) or rotating (R2) inner pipe. The radial connection can be used in any position on a radius of 360°.
- Ball bearings, factory-lubricated for life.
- Connection to rotating pressure system by means of standardised connection pieces with right-hand or left-hand male thread as per G/BSP (ISO 228) or NPT (ANSI).
- Radial and axial housing connection with right-hand female thread as per G/BSP (ISO 228) or NPT (ANSI).
- All other technical features same as Standard Series.

The Small Series DP 06

- Housing made of anodised aluminium. Atex design without anodisation.
- Ball bearings, factory-lubricated for life.
- Housing only available for one way flow with radial connection, right-hand female thread G/BSP (ISO 228) or for installation into the roll journal with axial connection.
- Connection to rotating pressure system by means of standardised connection pieces with right-hand or left-hand male thread, only in G/BSP (ISO 228).

Subject to technical changes

Application Data / Ordering instructions series DP

Application Data

Series		DP	DP	DP-800	DP	DPN
Design					1, 2, R2	1B, 1C, 2, R2
Nominal diameter DN mm		...06	10...50	10...50	65...100	10...50
Medium		compressed air cooling water hot water hydraulic oil)*	cooling water hot water	thermal oil	cooling water hot water	cooling water hot water
Temperature min...max °C		...120	-15...160	...160	-10...140	-10...90
Pressure PN min...max bar		...10	0,2...10	...10	0,2...10	0,2...10
Speed max...min ⁻¹		55 000/DN 3000	55 000/DN 2500	55 000/DN 2500	55 000/DN 850	55 000/DN 2500

Avoid combination of maximum values. Higher values and other media on request.

) * Application data for hydraulic oil: max 80°C, 80 bar, 400 min⁻¹

Ordering instructions

Example:

DP 15 R 5 1 -100

Standard and Small Series DP	Page 6 to 11
Nominal diameters DN in mm (≙ dimension A) 06, 10, 15, 20, 25, 32, 40, 50	
R rotor connection right-hand thread L left-hand thread K K-flange DN 40 and DN 50 F fixed flange DN 40 and DN 50	
Possible combinations of housing connection B with rotor connection D	
0 NPT K or F	
1 NPT G	
3 NPT NPT	
5 G G	DP 06 only available with combination 5
9 G K or F	Other combinations on request.
Sealing combination	
1 synthetic carbon 19K – chrome steel 18E	
3 metal impregnated synthetic carbon 19W – SIC 18C (silicon carbide)	
4 SIC 19C – SIC 18C	
5 synthetic carbon 19K – SIC 18C	DP 06 only available with combination 5
Consecutive numbers for special designs, numbering done by factory, -800 for thermal oil.	

Ordering instructions - Elbow P

Example:

PO 2 15 G -100

Design for inner pipe P2 non-rotating (with right-hand thread, G/BSP, ISO 228) PR2 rotating PO2 non-rotating (floating within O-ring)	
Nominal diameter identical with nominal diameter of DP	
Thread at connection C1/C2 G BSP (ISO 228) N NPT (ANSI)	
Consecutive numbers for special designs, numbering by factory, -800 for hot oil.	

Ordering instructions

Example:

DP R 2 100 L 5 4 -001

The Large Series DP 65-100 Page 12 to 15	
R	Design for rotating inner pipe with slide bearing and gland seal
1	Number of housing connections for one way flow
2	for two way flow
Nominal diameters DN in mm ($\hat{=}$ dimension A) 65, 75, 80, 100	
R	Rotor connection right-hand thread
L	left-hand thread
K	K-flange
F	fixed flange
Possible combinations of housing connection B with rotor connection D	
0	NPT K or F
1	NPT G
3	NPT NPT
5	G G
9	G K or F Other combinations on request.
Sealing combination	
1	synthetic carbon 19K – chrome steel 18E
3	metal impregnated synthetic carbon 19W – SIC 18C (silicon carbide)
4	SIC 19C – SIC 18C
Consecutive numbers for special designs, numbering by factory.	

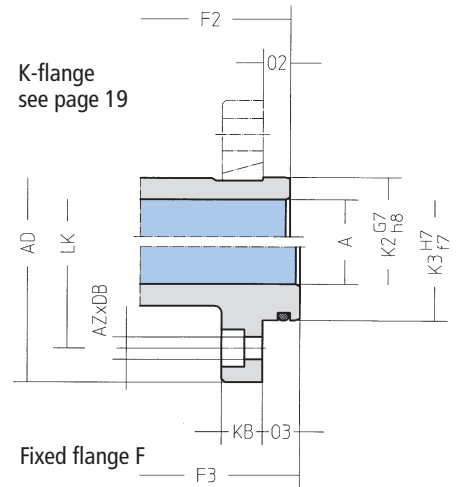
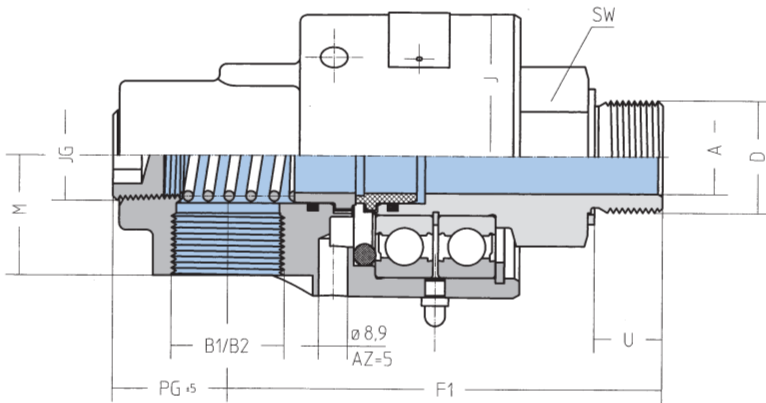
Ordering instructions

Example:

DPN 1B 25 R 5 3 -101

The Stainless Steel Series DPN Page 16 to 18	
1B	Number of housing connections radial connection
1C	axial connection
2	two way flow with fixes inner pipe
R2	two way flow with rotating inner pipe
Nominal diameter DN in mm ($\hat{=}$ dimension A) 10, 15, 20, 25, 32, 40, 50	
R	Rotor connection right-hand thread
L	left-hand thread
K	K-flange DN 40 and DN 50
Possible combinations of housing connection B with rotor connection D	
0	NPT K
1	NPT G
3	NPT NPT
5	G G
9	G K Other combinations on request.
Sealing combination	
1	synthetic carbon 19K – chrome steel 18E
3	metal impregnated synthetic carbon 19W – SIC 18C (silicon carbide)
4	SIC 19C – SIC 18C
001	Consecutive numbers for special designs, numbering by factory.
100	Housing and rotor in stainless steel 1.4571 (316 Ti).
101	Special designs in stainless steel 1.4571 (316 Ti) – numbering by factory.

DP DN 10-50

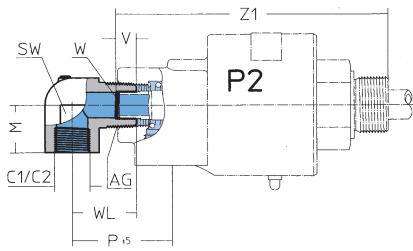


		DN	10	15	20	25	32	40	50
Housing connection	B1 = G	Type	DP 10 R 51	DP 15 R 51	DP 20 R 51	DP 25 R 51	DP 32 R 51	DP 40 R 51	DP 50 R 51
		Order-No.	1112050-051	1112100-051	1112150-051	1112200-051	1112250-051	1112300-051	1112350-051
		Type	DP 10 L 51	DP 15 L 51	DP 20 L 51	DP 25 L 51	DP 32 L 51	DP 40 L 51	DP 50 L 51
		Order-No.	1112051-051	1112101-051	1112151-051	1112201-051	1112251-051	1112301-051	1112351-051
	Type							DP 40 K 91	DP 50 K 91
	Order-No.							1112302-091	1112352-091
	Type							DP 40 F 91	DP 50 F 91
	Order-No.							1112303-091	1112353-091
B2 = NPT	Type	DP 10 R 11	DP 15 R 11	DP 20 R 11	DP 25 R 11	DP 32 R 11	DP 40 R 11	DP 50 R 11	
	Order-No.	1112050-011	1112100-011	1112150-011	1112200-011	1112250-011	1112300-011	1112350-011	
	Type	DP 10 L 11	DP 15 L 11	DP 20 L 11	DP 25 L 11	DP 32 L 11	DP 40 L 11	DP 50 L 11	
	Order-No.	1112051-011	1112101-011	1112151-011	1112201-011	1112251-011	1112301-011	1112351-011	
Type							DP 40 K 01	DP 50 K 01	
Order-No.							1112302-001	1112352-001	
Type							DP 40 F 01	DP 50 F 01	
Order-No.							1112303-001	1112353-001	

Ø A	9,5	13	17,5	22	30	35	47
B1	G 3/8	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2
B2	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT	1 1/4" NPT	1 1/2" NPT	2" NPT
D	G 3/8 A	G 1/2 A	G 3/4 A	G 1 A	G 1 1/4 A	G 1 1/2 A	G 2 A
F1	88	98	112	128	153	176	191
F2						164	201
F3						170	192
Ø J	54	58	74	84	100	110	137
Ø K2 G7/h8						50	65
Ø K3 H7/f7						65	80
M	24	25	31	36	42	45	57
O2						10	10
O3						20	20
PG ±5	26,5	24	30	37	46	53,5	60
U	15	18	17	20	26	27	27
Ø AD						100	125
AZ x Ø DB						5x9	5x11
JG	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT	1 1/4" NPT	1 1/2" NPT
KB						15	15
Ø LK						80	100
SW	24	30	36	46	55	60	75
weight (kg)	0,8	1	1,8	2,4	4,5	6,2	9

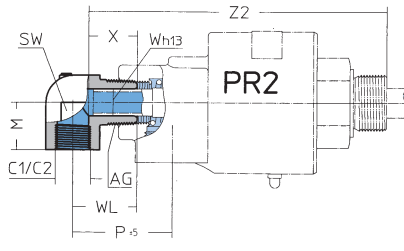
P DN 10-50

Elbow for series DP



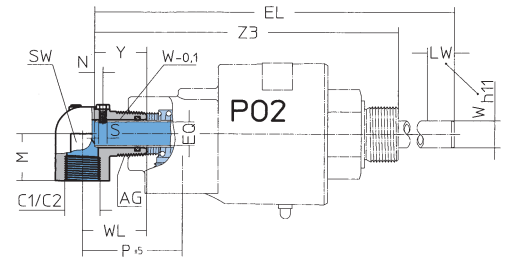
Type P 2

for non-rotating inner pipe
(with right-hand thread)



Type PR 2

for rotating inner pipe, directly borne
in elbow



Type PO 2

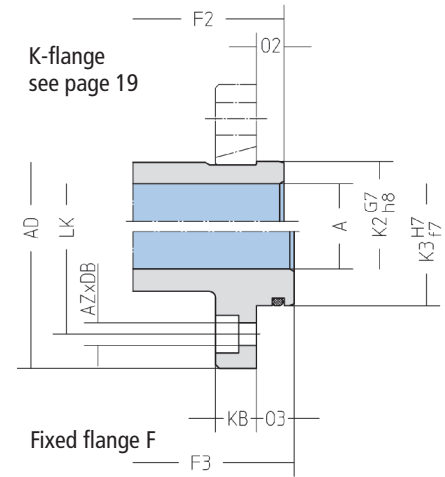
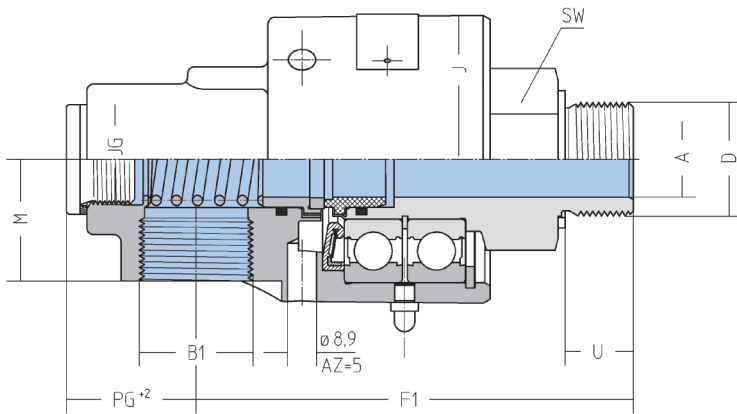
for non-rotating inner pipe, floating within elbow
and O-ring, anti-rotational protection by means
of screw. Inner pipe for type PO 2 available.

	DN	10	15	20	25	32	40	50
C1 = G	Type	P2 10 G	P2 15 G	P2 20 G	P2 25 G	P2 32 G	P2 40 G	P2 50 G
	Order-No.	1112066	1112116	1112166	1112216	1112266	1112316	1112366
	Type	PR 2 10 G	PR 2 15 G	PR 2 20 G	PR 2 25 G	PR 2 32 G	PR 2 40 G	PR 2 50 G
C2 = NPT	Order-No.	1112067	1112117	1112167	1112217	1112267	1112317	1112367
	Type	PO 2 10 G	PO 2 15 G	PO 2 20 G	PO 2 25 G	PO 2 32 G	PO 2 40 G	PO 2 50 G
	Order-No.	1112068	1112118	1112168	1112218	1112268	1112318	1112368
C1 = G	Type	P2 10 N	P2 15 N	P2 20 N	P2 25 N	P2 32 N	P2 40 N	P2 50 N
	Order-No.	1112069	1112119	1112169	1112219	1112269	1112319	1112369
	Type	PR 2 10 N	PR 2 15 N	PR 2 20 N	PR 2 25 N	PR 2 32 N	PR 2 40 N	PR 2 50 N
C2 = NPT	Order-No.	1112070	1112120	1112170	1112220	1112270	1112320	1112370
	Type	PO 2 10 N	PO 2 15 N	PO 2 20 N	PO 2 25 N	PO 2 32 N	PO 2 40 N	PO 2 50 N
	Order-No.	1112071	1112121	1112171	1112221	1112271	1112321	1112371
C1	G 1/4	G 3/8	G 1/2	G 1/2	G 3/4	G 3/4	G 1 1/4	
C2	1/4" NPT	3/8" NPT	1/2" NPT	1/2" NPT	3/4" NPT	3/4" NPT	1 1/4" NPT	
M	18	20	26	28	35	38	45	
N	5	5	5	5	5	5	5	
P ±5	42,5	38,5	51	59	74	82	98	
Ø S	5	5	5	5	5	5	5	
V	8	8	12	12	15	17	20	
W	M 6 x 1	G 1/8	G 1/4	G 3/8	G 1/2	G 3/4	G 1	
Ø W h13	6	10	13	16	22	26	32,2	
Ø W -0,1	6	10	13	16	22	26	34	
X	21	19,5	25,5	28,5	35	37	39	
Y	25	25	28	31	38	40	40	
Z1	112	118	140	161	195	226	250	
Z2	125	129	153,5	177,5	215	246	269	
Z3	129	135	156	180	218	249	270	
AG	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT	1 1/4" NPT	1 1/2" NPT	
SW	22	22	32	32	36	36	55	
WL	27	27	35	38	47	49	58,5	
weight (kg)	0,1	0,1	0,3	0,3	0,5	0,6	1,3	

Inner pipe for Elbow PO 2

	DN	10	15	20	25	32	40	50
Type		ES 10	ES 15	ES 20	ES 25	ES 32	ES 40	ES 50
Order no.		1190951	1190952	1190953	1190954	1190955	1190956	1190957
Ø W h11		6	10	13	16	22	26	34
Ø EQ		5	8	11	14	20	24	31
EL		176	188	193	252	269	297	342
LW		55	55	55	75	55	55	75

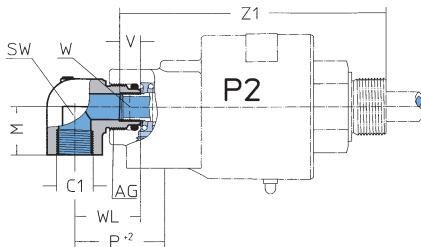
DP ...-800 DN 10-50



DN	10	15	20	25	32	40	50
Type	DP 10 R 53-800	DP 15 R 53-800	DP 20 R 53-800	DP 25 R 53-800	DP 32 R 53-800	DP 40 R 53-800	DP 50 R 53-800
Order-No.	1112050-800	1112100-800	1112150-800	1112200-800	1112250-800	1112300-800	1112350-800
Type	DP 10 L 53-800	DP 15 L 53-800	DP 20 L 53-800	DP 25 L 53-800	DP 32 L 53-800	DP 40 L 53-800	DP 50 L 53-800
Order-No.	1112051-800	1112101-800	1112151-800	1112201-800	1112251-800	1112301-800	1112351-800
Type						DP 40 K 93-800	DP 50 K 93-800
Order-No.						1112302-800	1112352-800
Type						DP 40 F 93-800	DP 50 F 93-800
Order-No.						1112303-800	1112353-800
Ø A	9,5	13	17,5	22	30	35	47
B1	G 3/8	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2
D	G 3/8 A	G 1/2 A	G 3/4 A	G 1 A	G 1 1/4 A	G 1 1/2 A	G 2 A
F1	88	98	112	128	153	176	191
F2						164	201
F3						170	192
Ø J	54	58	74	84	100	110	137
Ø K2 G7/h8						50	65
Ø K3 H7/f7						65	80
M	24	25	31	36	42	45	57
O2						10	10
O3						20	20
U	15	18	17	20	26	27	27
Ø AD						100	125
AZ x Ø DB						5x9	5x11
JG	G 1/4	G 3/8	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2
KB						15	15
Ø LK						80	100
PG +2	29,5	25	33,5	40,5	49,5	56,5	62,5
SW	24	30	36	46	55	60	75
weight (kg)	0,8	1	1,8	2,4	4,5	6,2	9

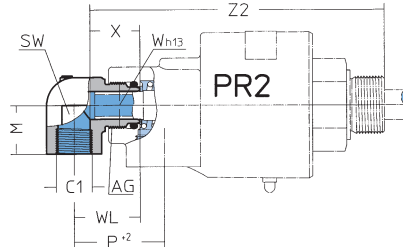
P ...-800 DN 10-50

Elbow for series DP



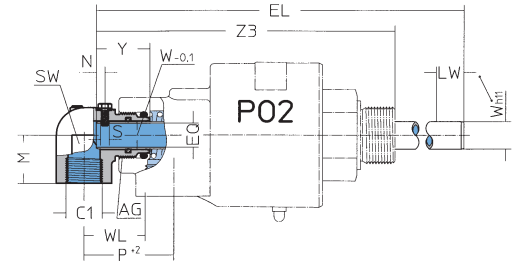
Type P 2

for non-rotating inner pipe
(with right-hand thread)



Type PR 2

for rotating inner pipe, directly borne
in elbow



Type PO 2

for non-rotating inner pipe, floating within elbow
and O-ring, anti-rotational protection by means
of screw. Inner pipe for type PO 2 available.

DN	10	15*	20*	25	32	40	50
Type	P2 10 G-800	P2 15 G-800	P2 20 G-800	P2 25 G-800	P2 32 G-800	P2 40 G-800	P2 50 G-800
Order-No.	1112066-800	1112116-800	1112166-800	1112216-800	1112266-800	1112316-800	1112366-800
Type	PR 2 10 G-800	PR 2 15 G-800	PR 2 20 G-800	PR 2 25 G-800	PR 2 32 G-800	PR 2 40 G-800	PR 2 50 G-800
Order-No.	1112067-800	1112117-800	1112167-800	1112217-800	1112267-800	1112317-800	1112367-800
Type	PO 2 10 G-800	PO 2 15 G-800	PO 2 20 G-800	PO 2 25 G-800	PO 2 32 G-800	PO 2 40 G-800	PO 2 50 G-800
Order-No.	1112068-800	1112118-800	1112168-800	1112218-800	1112268-800	1112318-800	1112368-800

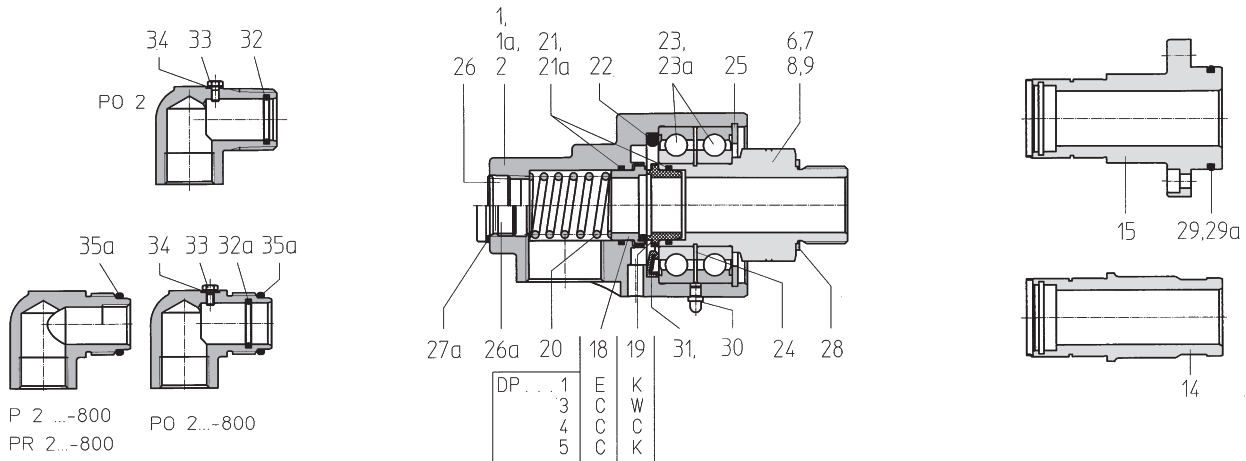
C1	G 1/4	G 3/8	G 1/2	G 1/2	G 3/4	G 3/4	G 1 1/4
M	18	20	26	28	35	38	45
N	5	5	5	5	5	5	5
P ±2	36,5	53	70	52,5	66,5	73,5	87,5
Ø S	5	5	5	5	5	5	5
V	8	8	12	12	15	17	20
W	M 6 x 1	G 1/8	G 1/4	G 3/8	G 1/2	G 3/4	G 1
Ø W h13	6	10	13	16	22	26	32,2
Ø W -0,1	6	10	13	16	22	26	34
X	21	19,5	25,5	28,5	35	37	39
Y	25	25	28	31	38	40	40
Z1	105,5	132	159	154,5	187,5	217,5	240
Z2	118,5	143,5	172,5	171	207,5	237,5	259
Z3	122,5	149	175	173,5	210,5	240,5	260
AG	G 1/4 A	G 3/8 A	G 1/2 A	G 3/4 A	G 1 A	G 1 1/4 A	G 1 1/2 A
SW	22	22	32	32	36	36	55
WL	27	27	35	38	47	49	58,5
weight (kg)	0,1	0,1	0,3	0,3	0,5	0,6	1,3

Inner pipe for Elbow PO 2 ...-800

DN	10	15	20	25	32	40	50
Type	ES 10-800	ES 15-800	ES 20-800	ES 25-800	ES 32-800	ES 40-800	ES 50-800
Order-No.	1190951-800	1190952-800	1190953-800	1190954-800	1190955-800	1190956-800	1190957-800
Ø W h11	6	10	13	16	22	26	34
Ø EQ	5	8	11	14	20	24	31
EL	169,5	202	212	245,5	261,5	288,5	332
LW	55	55	55	75	55	55	75

* At DN 15 and 20: Elbow with additional adapter !

DP Spare Parts DN 10-50



DN	10	15	20	25	32	40	50
1 housing G	1112091	1112141	1112191	1112241	1112291	1112341	1112391
1a housing G -800	1112091-100	1112141-100	1112191-100	1112241-100	1112291-100	1112341-100	1112391-100
2 housing N	1112092	1112142	1112192	1112242	1112292	1112342	1112392
6 rotor RG	1112078	1112128	1112178	1112228	1112278	1112328	1112378
7 rotor LG	1112079	1112129	1112179	1112229	1112279	1112329	1112379
8 rotor RN	1112080	1112130	1112180	1112230	1112280	1112330	1112380
9 rotor LN	1112081	1112131	1112181	1112231	1112281	1112331	1112381
14 rotor K						1112336	1112386
15 rotor F						1112337	1112387
18E mechanical seal E	1112088-001	1112138-001	1112188-001	1112238-001	1112288-001	1112338-001	1112388-001
18C mechanical seal C	1112088-002	1112138-002	1112188-002	1112238-002	1112288-002	1112338-002	1112388-002
19K counter face K	3511391-001	3511392-001	3511393-001	3511394-001	3511395-001	3511396-001	3511397-001
19W counter face W	3511391-002	3511392-002	3511393-002	3511394-002	3511395-002	3511396-002	3511397-002
19C counter face C	1112088-002	1112138-002	1112188-002	1112238-002	1112288-002	1112338-002	1112388-002
20 compression spring	3511661	3511662	3511663	3511664	3511665	3511666	3511667
21 O-ring	3511809	3511866	3511721	3511929	3511947	3511886	3511696
21a O-ring	3511809-001	3511866-001	3511721-001	3511929-001	3511947-001	3511886-001	3511696-001
22 O-ring	3511860	3511867	3511861	3511862	3511863	3511864	3511865
23 ball bearing	3510200	3510079	3510202	3510203	3510086	3510204	3510090
23a ball bearing	3510077-010	3510079-010	3510097-010	3510082-010	3510086-010	3510087-010	3510090-010
24 circlip	3501000	3501001	3501002	3501003	3501008	3501014	3501030
25 circlip	3501220	3501219	3501222	3501223	3501205	3501221	3501246
26 screw plug	3500663-004	3500662-004	3500684-004	3500621-004	3500622-004	3500623-004	3500624-004
26a screw plug	3500687	3500631	3500688	3500632	3500635	3500633	3500634
27a CU-seal	3502114-001	3502116-001	3502115-001	3502120-001	3502111-001	3502117-001	3502118-001
28 CU-seal	3502116-001	3502115-001	3502120-001	3502111-001	3502117-001	3502118-001	3502121-001
29 O-ring						3511948	3511949
29a O-ring						3511948-001	3511949-001
30 grease nipple	3500918	3500918	3500918	3500918	3500918	3500918	3500918
31* shaft seal	3512325-001	3512326-001	3512327-001	3512328-001	3512329-001	3512330-001	3512331-001

Spare Parts for Elbow

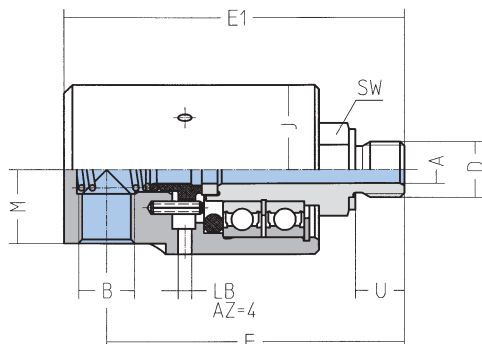
DN	10	15	20	25	32	40	50
32 O-ring	3511729	3511849	3511722	3511944	3511852	3511723	3511945
32a O-ring	3511729-001	3511849-001	3511722-001	3511944-001	3511852-001	3511723-001	3511945-001
33 hex. screw	3500014-003	3500014-003	3500015-003	3500015-003	3500014-003	3500014-003	3500015-003
34 CU-seal	3502122-001	3502122-001	3502122-001	3502122-001	3502122-001	3502122-001	3502122-001
35a O-ring	3511849-001	3511809-001	3511851-001	3511852-001	3511754-001	3511947-001	3512509-001

* For variant -800 Pos. 31 instead of pos. 22.

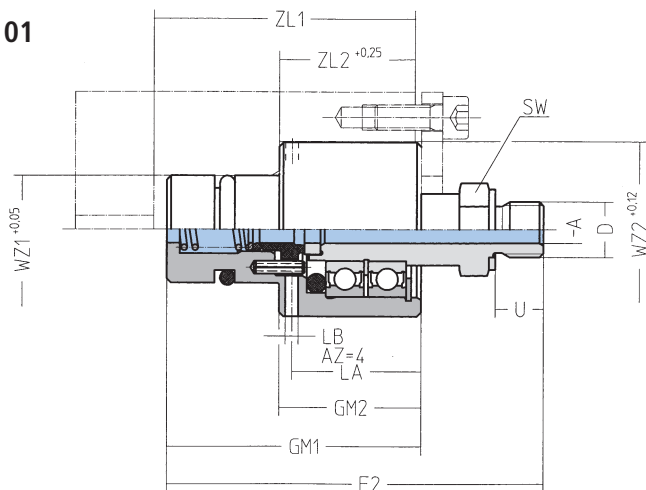
Please specify type designation when making an inquiry or placing an order.

DP DN 06 and Spare Parts

DP .. R/L 55



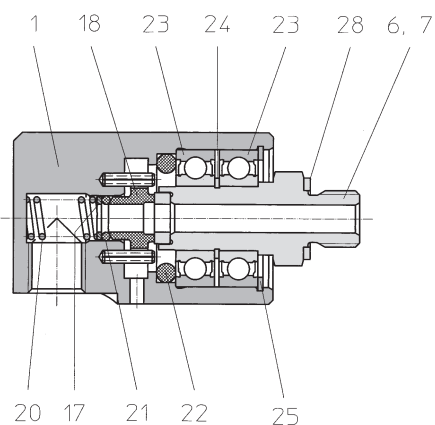
DP .. R/L -101



DN	06
Type	DP 06 R 55
Order-No.	1112000-055
Type	DP 06 L 55
Order-No.	1112001-055
Type	DP 06 R -101
Order-No.	1112000-101
Type	DP 06 L-101
Order-No.	1112001-101

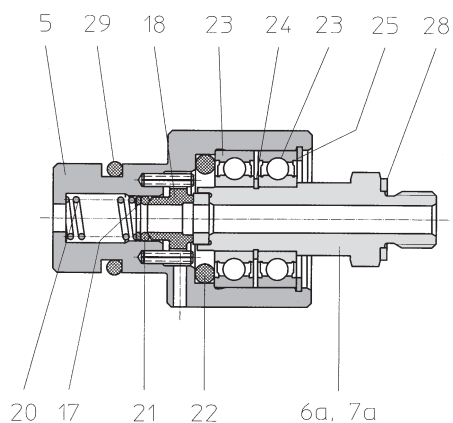
Ø A	6,5
B	G 1/4
D	G 1/4 A
E1	80
E2	89
F	70
ØJ	40
M	17,5
U	11,5
GM1	60
GM2	33,5
LA	30
ØLB	3,2
SW	19
WZ1	25,4
WZ2	41,66
ZL1	61,5
ZL2	32
weight (kg)	0,3

Spare Parts DN 06



DP .. R/L 55

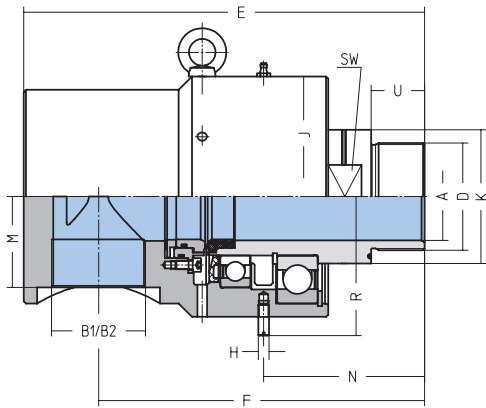
DP .. R/L -101



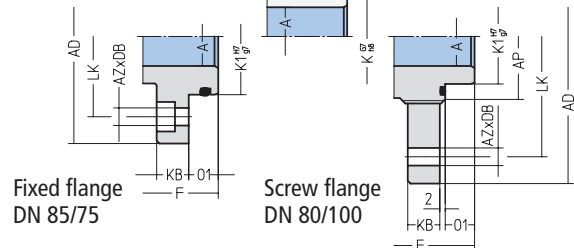
DN	06
1 housing G	1112041
5 housing (-101)	1112041-058
6 rotor RG	1112028-002
6a rotor RG (-101)	1112028-057
7 rotor LG	1112029-002
7a rotor LG (-101)	1112029-057
17 disc	3502113-001
18 mechanical seal	3511390-001
20 compression spring	3511521
21 O-ring	3511704-001
22 O-ring	3511906-016
23 ball bearing	3510047
24 circlip	3501025
25 circlip	3501200
28 CU-seal	3502114-001
29 O-ring	3511868

DP1 DN 65-100

for one way flow of a medium

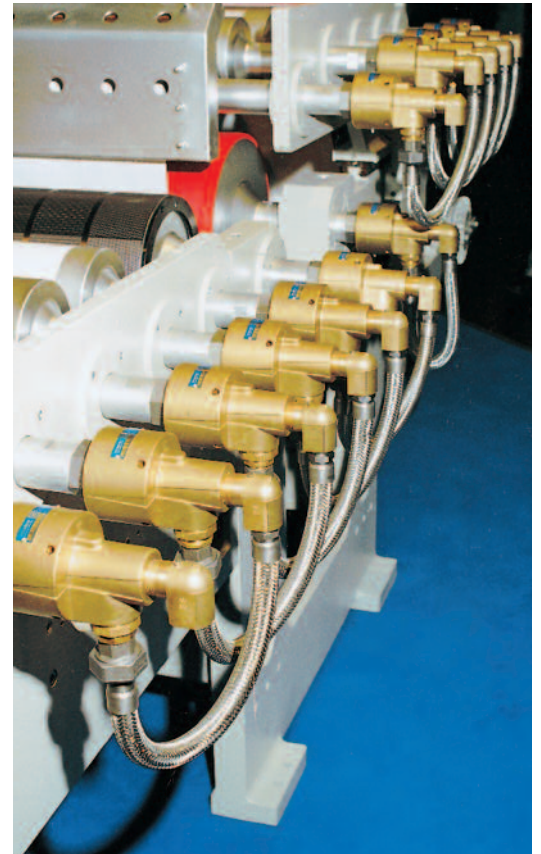


K-flange
see page 19



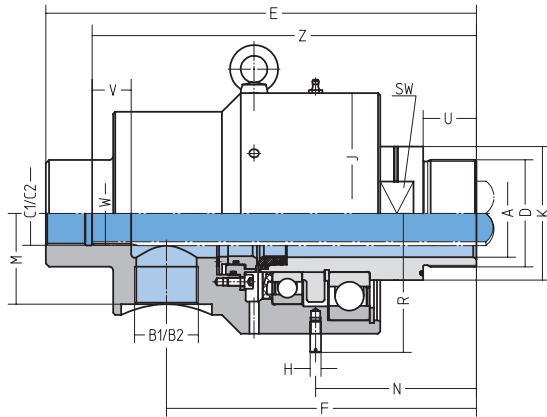
		DN	65	75	80	100
Housing connection	B1 = G	Type	DP 165 R 51	DP 175 R 51	DP 180 R 51	DP 1100 R 51
		Order-No.	1112400-051	1112575-051	1112450-051	1112550-051
		Type	DP 165 L 51	DP 175 L 51	DP 180 L 51	DP 1100 L 51
		Order-No.	1112401-051	1112576-051	1112451-051	1112551-051
		Type	DP 165 K 91	DP 175 K 91	DP 180 K 91	DP 1100 K 91
		Order-No.	1112402-091	1112577-091	1112452-091	1112552-091
	B2 = NPT	Type	DP 165 R 11	DP 175 R 11	DP 180 R 11	DP 1100 R 11
		Order-No.	1112400-011	1112575-011	1112450-011	1112550-011
		Type	DP 165 L 11	DP 175 L 11	DP 180 L 11	DP 1100 L 11
		Order-No.	1112401-011	1112576-011	1112451-011	1112551-011
		Type	DP 165 K 01	DP 175 K 01	DP 180 K 01	DP 1100 K 01
		Order-No.	1112402-001	1112577-001	1112452-001	1112552-001

Ø A	65	72	82	98
B1	G 2 1/2	G 3	G 3	G 4
B2	2 1/2" NPT	3" NPT	3" NPT	4" NPT
D	G 2 1/2 A	G 3 A	G 3 1/2 A	G 4 A
E	327	375	375	425
F	270	305	305	340
Ø H	10	10	10	12
Ø J	185	225	225	258
Ø K	104	115	125	144
Ø K G7/h8	85	87,29	105	114
Ø K1 H7/g7	98	105	101,7	120,62
M	62,5	85	85	100
N	134	151	151	169
O	25	30	30	30
O1	20	8	6,4	7,5
R	110	130	130	155
U	45	50	50	60
Ø AD	145	185	228,6	276
AZ x Ø DB	5x11	4x18	6x17,5	6x20,5
AP	-	-	141	160
KB	26	20	22,2	22,2
LK	120	145	192	228,6
SW	85	110	110	120
weight (kg)	31,5	58	58	88

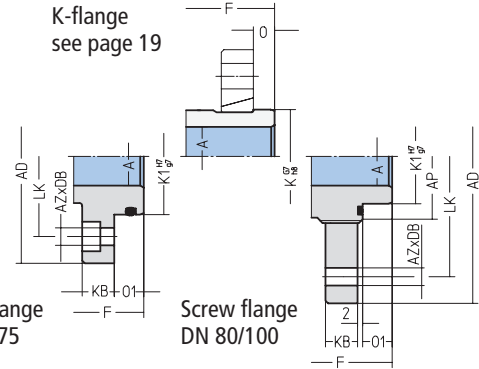


DP2 DN 65-100

for two way flow of a medium designed for non-rotating inner pipe



K-flange
see page 19



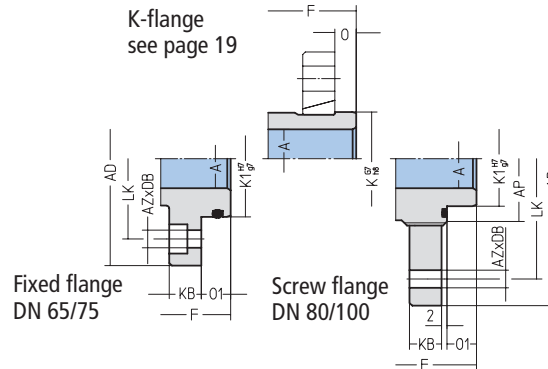
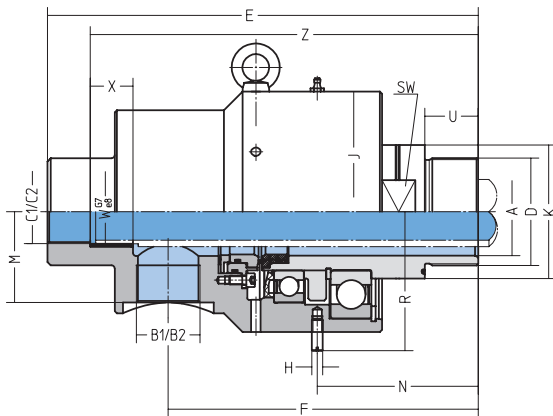
		DN	65	75	80	100
Housing connection	B1 = G1 = G	Type	DP 265 R 51	DP 275 R 51	DP 280 R 51	DP 2100 R 51
		Order-No.	1112404-051	1112579-051	1112454-051	1112554-051
		Type	DP 265 L 51	DP 275 L 51	DP 280 L 51	DP 2100 L 51
		Order-No.	1112405-051	1112580-051	1112455-051	1112555-051
		Type	DP 265 K 91	DP 275 K 91	DP 280 K 91	DP 2100 K 91
		Order-No.	1112406-091	1112581-091	1112456-091	1112556-091
	B2 = C2 = NPT	Type	DP 265 R 11	DP 275 R 11	DP 280 R 11	DP 2100 R 11
		Order-No.	1112404-011	1112579-011	1112454-011	1112554-011
		Type	DP 265 L 11	DP 275 L 11	DP 280 L 11	DP 2100 L 11
		Order-No.	1112405-011	1112580-011	1112455-011	1112555-011
		Type	DP 265 K 01	DP 275 K 01	DP 280 K 01	DP 2100 K 01
		Order-No.	1112406-001	1112581-001	1112456-001	1112556-001

Ø A	65	72	82	98
B1, C1	G 1 ½	G 2	G 2	G 2 ½
B2, C2	1 ½" NPT	2" NPT	2" NPT	2 ½" NPT
D	G 2 ½ A	G 3 A	G 3 ½ A	G 4 A
E	345	403	403	445
F	255	290	290	320
Ø H	10	10	10	12
Ø J	185	225	225	258
Ø K	104	115	125	144
Ø K G7/h8	85	87,29	105	114
Ø K1 H7/g7	98	105	101,7	120,62
M	62,5	85	85	100
N	134	151	151	169
O	25	30	30	30
O1	20	8	6,4	7,5
R	110	130	130	155
U	45	50	50	60
V	28,5	36	36	38,5
W	G 1 ½	G 2	G 2	G 2 ½
Z	308,5	359	359	398,5
Ø AD	145	185	228,6	276
AZ x Ø DB	5x11	4x18	6x17,5	6x20,5
AP	-	-	141	160
KB	26	20	22,2	22,2
LK	120	145	192	228,6
SW	85	110	110	120
weight (kg)	28	52	52	75



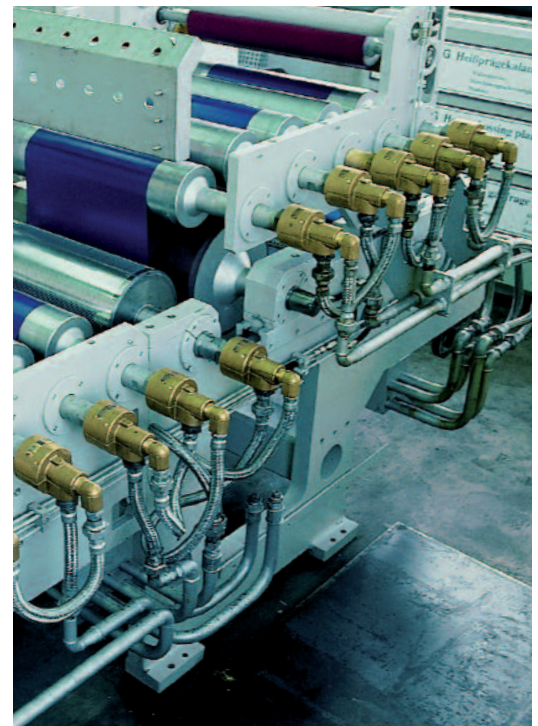
DPR2 DN 65-100

for two way flow of a medium designed for rotating inner pipe

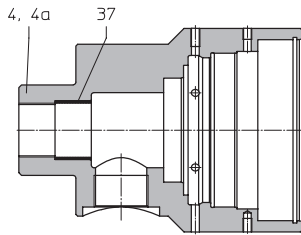


		DN	65	75	80	100
Housing connection	B1 = G1 = G	Type	DPR 265 R 51	DPR 275 R 51	DPR 280 R 51	DPR 2100 R 51
		Order-No.	1112408-051	1112583-051	1112458-051	1112558-051
		Type	DPR 265 L 51	DPR 275 L 51	DPR 280 L 51	DPR 2100 L 51
	B2 = C2 = NPT	Order-No.	1112409-051	1112584-051	1112459-051	1112559-051
		Type	DPR 265 K 91	DPR 275 K 91	DPR 280 K 91	DPR 2100 K 91
		Order-No.	1112410-091	1112585-091	1112460-091	1112560-091
B1 = G1 = G	Type	DPR 265 R 11	DPR 275 R 11	DPR 280 R 11	DPR 2100 R 11	
	Order-No.	1112408-011	1112583-011	1112458-011	1112558-011	
	Type	DPR 265 L 11	DPR 275 L 11	DPR 280 L 11	DPR 2100 L 11	
B2 = C2 = NPT	Order-No.	1112409-011	1112584-011	1112459-011	1112559-011	
	Type	DPR 265 K 01	DPR 275 K 01	DPR 280 K 01	DPR 2100 K 01	
	Order-No.	1112410-001	1112585-001	1112460-001	1112560-001	

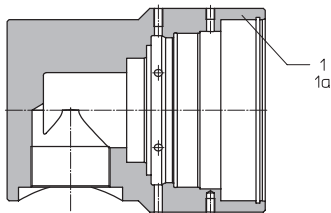
Ø A	65	72	82	98
B1, C1	G 1 ½	G 2	G 2	G 2 ½
B2, C2	1 ½" NPT	2" NPT	2" NPT	2 ½" NPT
D	G 2 ½ A	G 3 A	G 3 ½ A	G 4 A
E	345	403	403	445
F	255	290	290	320
Ø H	10	10	10	12
Ø J	185	225	225	258
Ø K	104	115	125	144
Ø K G7/h8	85	87,29	105	114
Ø K1 H7/g7	98	105	101,7	120,62
M	62,5	85	85	100
N	134	151	151	169
O	25	30	30	30
O1	20	8	6,4	7,5
R	110	130	130	155
U	45	50	50	60
W Ø G7/e8	45	60	60	75
X	30	40	40	40
Z	310	363	363	400
Ø AD	145	185	228,6	276
AZ x Ø DB	5x11	4x18	6x17,5	6x20,5
AP	-	-	141	160
KB	26	20	22,2	22,2
LK	120	145	192	228,6
SW	85	110	110	120
weight (kg)	28	52	52	75



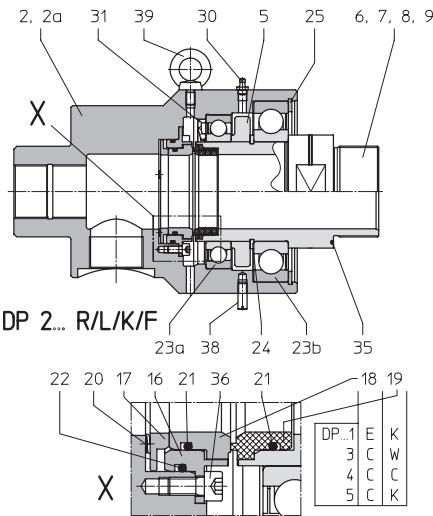
Spare Parts for types DP1, 2, R2 – DN 65-100



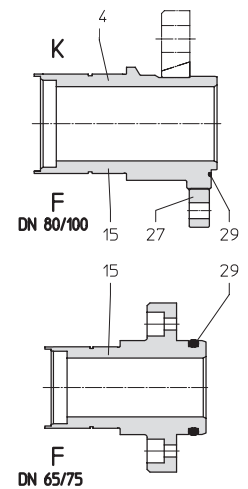
DPR 2... R/L/K/F



DP 1... R/L/K/F



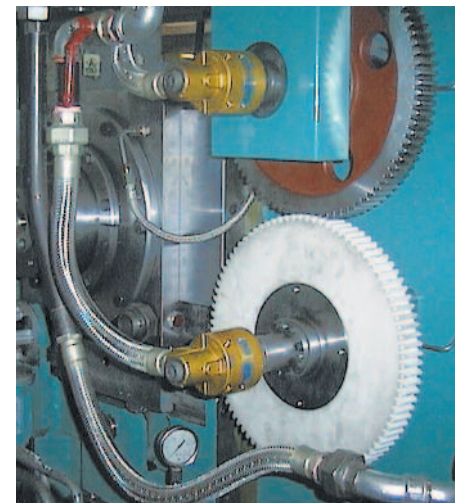
DP 2... R/L/K/F



DN 80/100

DN 65/75

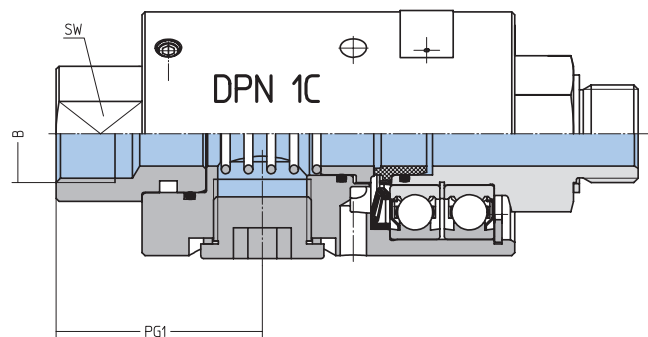
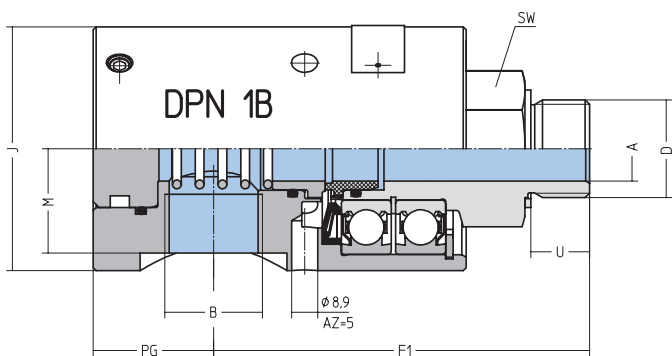
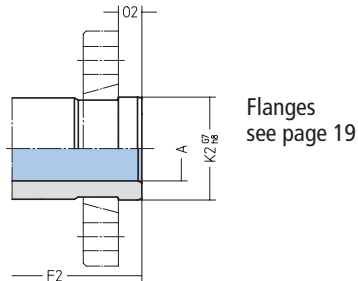
DN	65	75	80	100
1 Housing 1 G	1112441	1112491	1112491	1112541
1a Housing 1 N	1112445	1112495	1112495	1112545
2 Housing 2 G	1112442	1112492	1112492	1112542
2a Housing 2 N	1112446	1112496	1112496	1112546
4 Housing R2 G	1112443	1112493	1112493	1112543
4a Housing R2 N	1112447	1112497	1112497	1112547
5 Distance ring	1112419	1112469	1112469	1112519
6 Rotor R G	1112428	1112603	1112478	1112528
7 Rotor L G	1112429	1112604	1112479	1112529
8 Rotor R N	1112430	1112605	1112480	1112530
9 Rotor L N	1112431	1112606	1112481	1112531
14 Rotor K	1112436	1112611	1112486	1112536
15 Rotor F	1112437	1112612	1112487	1112537
16 Fixing ring	1112415	1112465	1112465	1112515
17 Thrust collar	1112417	1112467	1112467	1112517
18E Mechanical seal E	1112438-001	1112488-001	1112488-001	1112539-001
18C Mechanical seal C	1112438-002	1112488-002	1112488-002	1112539-002
19K Counter face K	3511385-001	3511386-001	3511386-001	3511388-001
19W Counter face W	3511385-002	3511386-002	3511386-002	3511388-002
19C Counter face C	1112438-002	1112488-002	1112488-002	1112539-002
20 Compression spring	3511550	3511551	3511551	3511551
21 O-ring	3511708	3512553	3512553	3511828
22 O-ring	3512553	3511828	3511828	3511815-012
23b Ball bearing 2	3510007-006	3510208	3510208	3510145-006
24 Circlip	3501005	3501006	3501006	3501031
25 Circlip	3501253	3501238	3501238	3501247
27 Screw flange	-	-	1190472-009	1190473-014
29 O-ring	3511694	3511901	3511828	3511716
30 Lubric. nipple	3500913	3500913	3500913	3500913
31* Shaft seal	3512358-001	3512319-001	3512319-001	3512334-001
35 O-ring	3511894	3511709	3511828	3511716
36 Cyl. head screw	3500354-070	3500354-070	3500354-070	3500354-070
37 Slide bearing	3510514	3510523	3510523	3510525
38 Set screw	3500678	3500678	3500678	3500587
39 Eye screw	3500686	3500686	3500686	3500686



* Pos. 31 on request for additional bearing seal.
Please specify type designation when making an inquiry or placing an order.

DPN1 DN 10-50

for one way flow of a medium

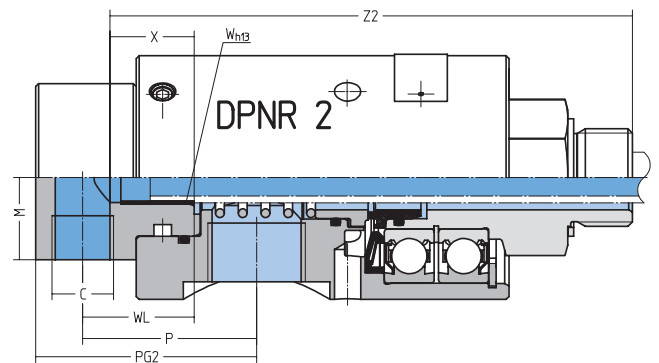
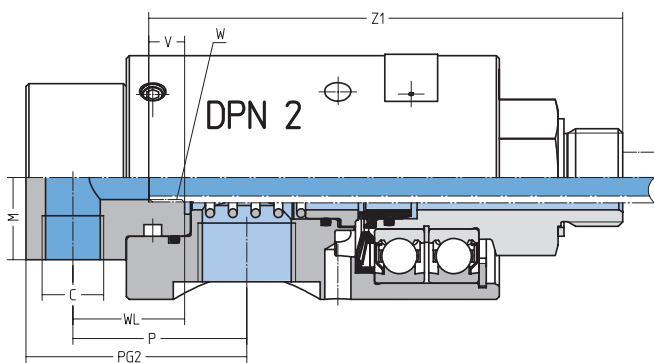
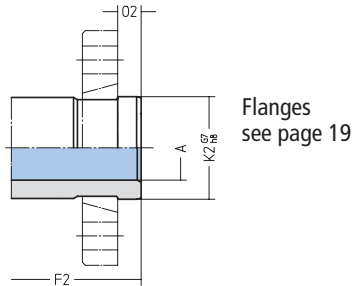


DN	10	15	20	25	32	40	50
Type	DPN 1B10 R 51	DPN 1B15 R 51	DPN 1B20 R 51	DPN 1B25 R 51	DPN 1B32 R 51	DPN 1B40 R 51	DPN 1B50 R 51
Order-No.	1113050-051	1113100-051	1113150-051	1113200-051	1113250-051	1113300-051	1113350-051
Type	DPN 1B10 L 51	DPN 1B15 L 51	DPN 1B20 L 51	DPN 1B25 L 51	DPN 1B32 L 51	DPN 1B40 L 51	DPN 1B50 L 51
Order-No.	1113051-051	1113101-051	1113151-051	1113201-051	1113251-051	1113301-051	1113351-051
Type						DPN 1B40 K 91	DPN 1B50 K 91
Order-No.						1113302-091	1113352-091
Type	DPN 1C10 R 51	DPN 1C15 R 51	DPN 1C20 R 51	DPN 1C25 R 51	DPN 1C32 R 51	DPN 1C40 R 51	DPN 1C50 R 51
Order-No.	1113053-051	1113103-051	1113153-051	1113203-051	1113253-051	1113303-051	1113353-051
Type	DPN 1C10 L 51	DPN 1C15 L 51	DPN 1C20 L 51	DPN 1C25 L 51	DPN 1C32 L 51	DPN 1C40 L 51	DPN 1C50 L 51
Order-No.	1113054-051	1113104-051	1113154-051	1113204-051	1113254-051	1113304-051	1113354-051
Type						DPN 1C40 K 91	DPN 1C50 K 91
Order-No.						1113305-091	1113355-091
$\emptyset A$	9,5	13	17,5	22	30	35	47
B	G 3/8	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2
D	G 3/8 A	G 1/2 A	G 3/4 A	G 1 A	G 1 1/4 A	G 1 1/2 A	G 2 A
F1	88	98	112	128	153	176	191
F2						164	201
$\emptyset J$	54	58	74	83	100	110	137
$\emptyset K2 G7/h8$						50	65
M	24	25	31	36	42	45	57
O2						10	10
U	15	18	17	20	26	27	27
PG	30	25	34	41	54	56	63
PG1	45	50	60	70	80	90	100
SW	24	30	36	46	55	60	75
weight (kg)	1,4	1,6	3	5	7,6	11,5	17

DPN2, DPNR2 DN 10-50

for two way flow of a medium

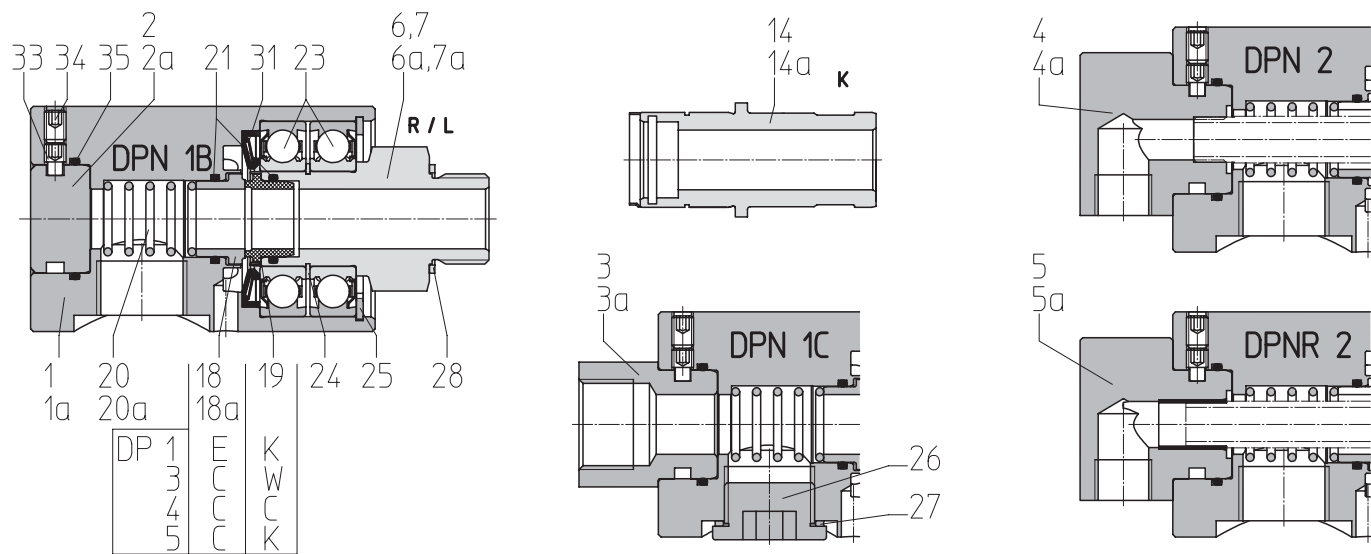
DPN2 for non-rotating inner pipe, DPNR2 for rotating inner pipe



DN	10	15	20	25	32	40	50
Type	DPN 210 R 51	DPN 215 R 51	DPN 220 R 51	DPN 225 R 51	DPN 232 R 51	DPN 240 R 51	DPN 250 R 51
Order-No.	1113060-051	1113110-051	1113160-051	1113210-051	1113260-051	1113310-051	1113360-051
Type	DPN 210 L 51	DPN 215 L 51	DPN 220 L 51	DPN 225 L 51	DPN 232 L 51	DPN 240 L 51	DPN 250 L 51
Order-No.	1113061-051	1113111-051	1113161-051	1113211-051	1113261-051	1113311-051	1113361-051
Type						DPN 240 K 91	DPN 250 K 91
Order-No.						1113312-091	1113362-091
Type	DPNR 210 R 51	DPNR 215 R 51	DPNR 220 R 51	DPNR 225 R 51	DPNR 232 R 51	DPNR 240 R 51	DPNR 250 R 51
Order-No.	1113063-051	1113113-051	1113163-051	1113213-051	1113263-051	1113313-051	1113363-051
Type	DPNR 210 L 51	DPNR 215 L 51	DPNR 220 L 51	DPNR 225 L 51	DPNR 232 L 51	DPNR 240 L 51	DPNR 250 L 51
Order-No.	1113064-051	1113114-051	1113164-051	1113214-051	1113264-051	1113314-051	1113364-051
Type						DPNR 240 K 91	DPNR 250 K 91
Order-No.						1113315-091	1113365-091

C	G 1/4	G 3/8	G 1/2	G 1/2	G 3/4	G 3/4	G 1 1/4
M	18	20	26	28	35	38	45
P	42,5	38,5	51	59	74	82	98
V	8	8	12	12	15	17	20
W	M 6x1	G 1/8	G 1/4	G 3/8	G 1/2	G 3/4	G 1
Ø Wh13	6	10	13	16	22	25	32
X	21	19,5	25,5	28,5	35	37	39
Z1	112	118	140	161	195	226	250
Z2	125	129	153,5	177,5	215	246	269
PG2	54	50	67	75	92	100	125
WL	27	27	35	38	47	49	58,5
weight (kg)	1,5	1,8	3,7	5,7	8,6	13,5	20

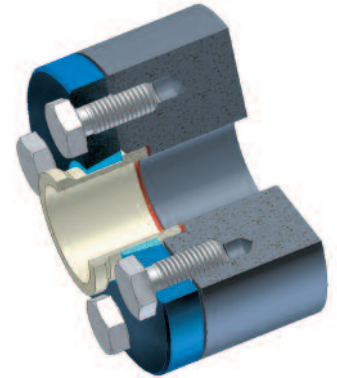
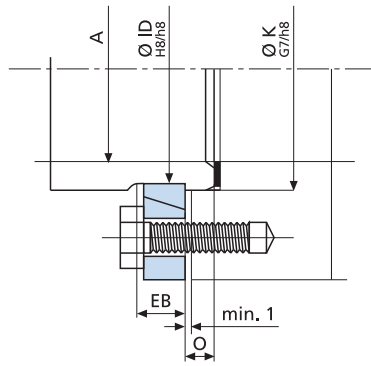
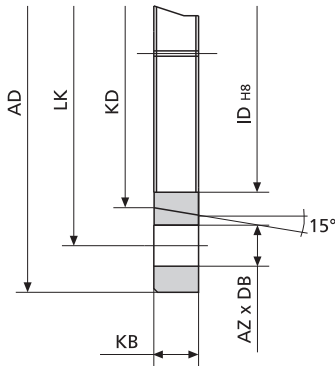
Spare Parts for types DPN1, 2, R2 – DN 10-50



DN	10	15	20	25	32	40	50
1 Housing G	1112093-200	1112143-200	1112193-200	1112243-200	1112293-200	1112343-200	1112393-200
1a Housing G	1112093-204	1112143-204	1112193-204	1112243-204	1112293-204	1112343-204	1112393-204
2 Cover	1112095-208	1112145-208	1112195-208	1112245-208	1112295-208	1112345-208	1112395-208
2a Cover	1112095-206	1112145-206	1112195-206	1112245-206	1112295-206	1112345-206	1112395-206
3 Housing connection G	1112094-207	1112144-207	1112194-207	1112244-207	1112294-207	1112344-207	1112394-207
3a Housing connection G	1112094-205	1112144-205	1112194-205	1112244-205	1112294-205	1112344-205	1112394-205
4 Elbow P2 G	1112066-201	1112116-201	1112166-201	1112216-201	1112266-201	1112316-201	1112366-201
4a Elbow P2 G	1112066-209	1112116-209	1112166-209	1112216-209	1112266-209	1112316-209	1112366-209
5 Elbow PR2 G	1112067-203	1112117-203	1112167-203	1112217-203	1112267-203	1112317-203	1112367-203
5a Elbow PR2 G	1112067-211	1112117-211	1112167-211	1112217-211	1112267-211	1112317-211	1112367-211
6 Rotor RG	1112078	1112128	1112178	1112228	1112278	1112328	1112378
6a Rotor RG	1112078-157	1112128-157	1112178-092	1112228-080	1112278-036	1112328-157	1112378-059
7 Rotor LG	1112079	1112129	1112179	1112229	1112279	1112329	1112379
7a Rotor LG	1112079-157	1112129-157	1112179-092	1112229-080	1112279-036	1112329-157	1112379-059
14 Rotor K						1112336	1112386
14a Rotor K						1112336-163	1112386-163
18 Mechanical seal E	1112088-001	1112138-001	1112188-001	1112238-001	1112288-001	1112338-001	1112388-001
18 Mechanical seal C	1112088-002	1112138-002	1112188-002	1112238-002	1112288-002	1112338-002	1112388-002
18a Mechanical seal C	1112088-159	1112138-159	1112188-077	1112238-081	1112288-159	1112338-159	1112388-159
19K Counter face K	3511391-001	3511392-001	3511393-001	3511394-001	3511395-001	3511396-001	3511397-001
19W Counter face W	3511391-002	3511392-002	3511393-002	3511394-002	3511395-002	3511396-002	3511397-002
19C Counter face C	1112088-002	1112138-002	1112188-002	1112238-002	1112288-002	1112338-002	1112388-002
20 Compression spring	3511661	3511662	3511663	3511664	3511665	3511666	3511667
20a Compression spring	3511661-001	3511662-001	3511663-001	3511664-001	3511665-001	3511666-001	3511667-001
21 O-ring	3511809	3511866	3511721	3511929	3511947	3511886	3511696
23 Ball bearing	3510200-008	3510079-008	3510097-008	3510148	35110086-008	3510087-008	3510090-008
24 Circlip	3501000-001	3501001-001	3501002-001	3501003-001	3501008-001	3501027	3501030-001
25 Circlip	3501220-001	3501219-001	3501222-001	3501223-001	3501205-001	3501241	3501246-001
26 Screw plug	3500631-001	3500688-001	3500632-001	3500635-001	3500633-001	3500634-001	3500641-003
27 Copper seal	3502116-001	3502115-001	3502120-001	3502111-001	3502117-001	3502118-001	3502121-001
28 Copper seal	3502116-001	3502115-001	3502120-001	3502111-001	3502117-001	3502118-001	3502121-001
31 Shaft seal	3512325-001	3512326-001	3512327-001	3512328-001	3512329-001	3512330-001	3512331-001
33 Setscrew	3500576-002	3500576-002	3500516-002	3500516-002	3500534-002	3500534-002	3500586-002
34 Setscrew	3502163-002	3502163-002	3500591-002	3500591-002	3500533-002	3500533-002	3500592-002
35 O-ring	3511852	3512521	3511754	3511713	3511942	3512540	3512503

Execution a for variant -100. Please specify type designation when making an inquiry or placing an order.

Journal Flanges for K Rotor Connection



DN	K-flange	Order-No.	Inner ring	Order-No.	Flat pack. Order-No.	Ø A	Ø AD	Ø LK	AZ x Ø DB	Ø KD	Ø ID H8/h8	KB	Ø K G7/h8	O	EB
10	KF 10-0	1190430	IR 10-0	1190400	3512230	10	55	40	4x7	20	17	10	18	6	11
15	KF 15-0	1190431	IR 15-0	1190401	3512231	13	70	50	4x9	26	22	10	24	6	11
20	KF 20-0	1190432	IR 20-0	1190402	3512232	20	75	55	4x9	32	28	12	30	8	13
25	KF 25-0	1190433	IR 25-0	1190403	3512233	25	80	60	4x9	37	33	12	35	8	13
32	KF 32-0	1190434	IR 32-0	1190404	3512234	32	100	75	4x11	48	43	12	45	8	13
32	KF 32-500	1190434-500	IR 32-500	1190404-500	3512234	32	115	90	4x11	48	43	15	45	15	16
40	KF 40-0	1190435	IR 40-0	1190405	3512235	38	105	80	4x11	53	48	15	50	10	16
40	KF 40-500	1190435-500	IR 40-500	1190405-500	3512235	38	120	95	4x11	53	48	18	50	20	20
50	KF 50-0	1190436	IR 50-0	1190406	3512236	50	130	100	4x14	69	63	15	65	10	16
50	KF 50-500	1190436-500	IR 50-500	1190406-500	3512236	50	145	115	4x14	69	63	20	65	25	22
65	KF 65-0	1190437	IR 65-0	1190407	3512237	66	150	120	4x14	89	82	15	85	10	16
65	KF 65-500	1190437-500	IR 65-500	1190407-500	3512237	66	165	135	4x14	89	82	25	85	25	28
65	KF 65-37	1190437-037	IR 65-0	1190407	3512237	66	150	120	6x14	89	82	15	85	25	28
75	KF 75-0	1190440	IR 75-0	1190420	1190191-058	67	203	171,5	5x17,5	89	84,2	31	87,29	22,2	
80	KF 80-0	1190438	IR 80-0	1190408	3512238	81	180	145	4x18	109	102	18	105	12	20
80	KF 80-500	1190438-500	IR 80-500	1190408-500	3512238	81	205	170	4x18	109	102	30	105	30	34
100	KF 100-0	1190439	IR 100-0	1190409	3512239	98	195	160	6x18	120	110	20	114	12	22
100	KF 100-500	1190439-500	IR 100-500	1190409-500	3512239	98	220	185	6x18	120	110	30	114	30	34
125	KF 125-0	1190450	IR 125-0	1190410	1190025	120	225	190	6x18	147	137	22	142	20	25
125	KF 125-500	1190450-500	IR 125-500	1190410-500	1190035	120	260	225	8x18	155	145	35	150	35	39
150	KF 150-0	1190451	IR 150-0	1190411	1190026	145	255	220	8x18	178	165	25	170	25	28
150	KF 150-500	1190451-500	IR 150-500	1190411-500	1190036	145	300	260	8x18	185	175	40	180	40	44
200	KF 200-0	1190452	IR 200-0	1190412	1190027	195	310	275	8x18	232	220	28	225	30	32
200	KF 200-500	1190452-500	IR 200-500	1190412-500	1190037	195	360	320	8x18	235	224	45	230	45	49
250	KF 250-0	1190453	IR 250-0	1190413	1190028	240	390	350	8x23	290	273	37	280	35	40
250	KF 250-500	1190453-500	IR 250-500	1190413-500	1190038	240	435	390	8x23	295	278	50	285	50	54
300	KF 300-0	1190454	IR 300-0	1190414	1190029	295	470	410	16x23	350	332	42	340	40	45

Versions KF...-0 and IR...-0:

DX/DXS	DN 10 – 80
DXSB	DN 50 – 80
DP	DN 40 – 100
H/HW	DN 15 – 100
HWB/A) ¹	DN 32 – 100
M	DN 15 – 100
DA	DN 50 – 300

Versions KF...-500 and IR...-500:

DXSB	DN 100 – 150
HWA	DN 100 – 300
DQ	DN 25 – 150

It is important to evenly tighten the screws.

¹ KF65-0 only up to 210°C, 20 bar or 300°C, 10 bar.
For higher data use KF 65-37.

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