

ZAWORY KULOWE

2-DROGOWE (PRZELOTOWE)



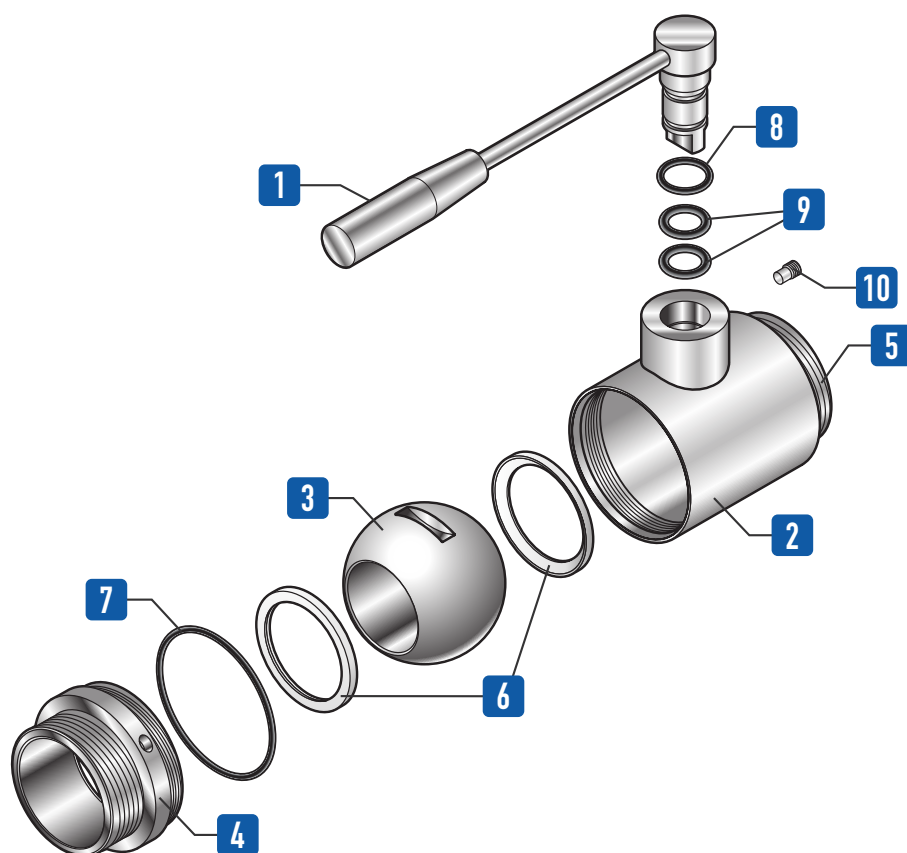
ZAKRES INFORMACJI	STRONA
OGÓLNE DANE PRODUKTU	2-3
OZNACZENIA W KATALOGU	4
OPIS NORM	5-7
UCHWYTY I USZCZELKI ZAWORÓW	8
WARIANTY I DANE TECHNICZNE	9-15

SERIA 2100

CECHY PRODUKTU

- Estetyczna i łatwa w konserwacji konstrukcja
- Wykonane ze stali nierdzewnej AISI 304L lub 316L
- Polerowana powierzchnia zewnętrzna
- Uchwyt umożliwiający otwieranie i zamykanie
- Dostępna szeroka gama konfiguracji przyłączy
- Dostępne opcjonalne wersje uchwytów

strona www
produktu



MATERIAŁ	USZCZELNIENIE	MAX [bar]			MAX [°C]	
		do DN60	DN65-100	od DN120	PRACY	ZAMKNIĘCIA
AISI 304L	PTFE + NBR	16	10	6	+100	+100
AISI 316L	PTFE + NBR	16	10	6	+100	+100
AISI 304L	PTFE + VITON	16	10	6	+140	+180
AISI 316L	PTFE + VITON	16	10	6	+140	+180
AISI 304L	PTFE + EPDM	16	10	6	+140	+160
AISI 316L	PTFE + EPDM	16	10	6	+140	+160

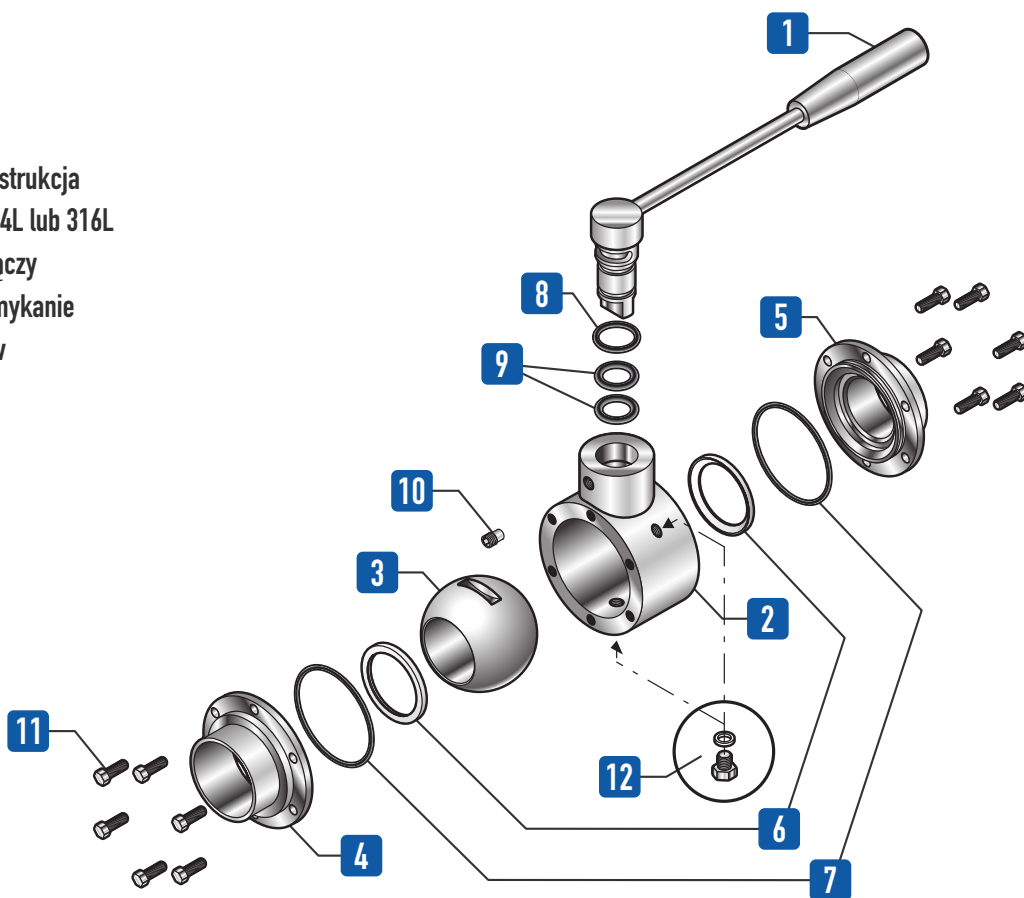
SYMBOL	CZĘŚĆ	MATERIAŁ	ILOŚĆ
1	Uchwyt ON/OFF	304/316	1
2	Korpus zaworu	304/316	1
3	Kula przelotowa	304/316	1
4	Złącze frontowe	304/316	1
5	Złącze tylne	304/316	1
6	Uszczelka	PTFE	2
7	O-ring złącza	NBR / VITON / NBR	2
8	O-ring uchwyty	NBR / VITON / NBR	1
9	O-ring uchwyty	NBR / VITON / NBR	2-3
10	Zawłczeka gwintowana	304	1

SERIA 2200

CECHY PRODUKTU

- Łatwa w konserwacji i demontażu konstrukcja
- Wykonane ze stali nierdzewnej AISI 304L lub 316L
- Możliwość samodzielnej zmiany przyłączy
- Uchwyt umożliwiający otwieranie i zamykanie
- Dostępne opcjonalne wersje uchwytów

strona www
produktu



MATERIAŁ	USZCZELNIENIE	MAX [bar]			MAX [°C]	
		do DN60	DN65-100	od DN120	PRACY	ZAMKNIĘCIA
AISI 304L	PTFE + NBR	16	10	6	+100	+100
AISI 316L	PTFE + NBR	16	10	6	+100	+100
AISI 304L	PTFE + VITON	16	10	6	+140	+180
AISI 316L	PTFE + VITON	16	10	6	+140	+180
AISI 304L	PTFE + EPDM	16	10	6	+140	+160
AISI 316L	PTFE + EPDM	16	10	6	+140	+160

SYMBOL	CZĘŚĆ	MATERIAŁ	ILOŚĆ
1	Uchwyt ON/OFF	304/316	1
2	Korpus zaworu	304/316	1
3	Kula przeletowa	304/316	1
4	Złącze frontowe	304/316	1
5	Złącze tylne	304/316	1
6	Uszczelka	PTFE	2
7	O-ring złącza	NBR / VITON / NBR	2
8	O-ring uchwytu	NBR / VITON / NBR	1
9	O-ring uchwytu	NBR / VITON / NBR	2-3
10	Zawłczeka gwintowana	304	1
11	Śruba blokująca	304	4-6
12	Śruba odpływowa	304 + PTFE	0 / 1 / 2

ZAWORY KULOWE 2-DROGOWE (PRZELOTOWE)									
2100/DD ZAWÓR KULOWY DIN GWINT / GWINT (ME. / ME.)									
N°	DN	Frost	Amm	Bmm	Cmm	Dmm	Emm	kg	
1	10	20	10	20	70	75	58	0.30	
2	15	24	15	25	72	82	67	0.40	
3	20	44	20	40	85	92	70	0.50	
4	25	52	25	50	96	98	75	1.10	
5	32	58	32	58	98	120	101	1.60	
6	40	65	36	62	104	120	101	1.70	
7	50	78	45	78	115	153	120	2.80	
8	50	78	50	90	133	153	125	3.80	
9	60	85	57	100	138	153	130	4.40	
10	65	95	66	114	165	190	158	7.00	
11	80	110	76	133	184	248	193	10.20	
12	100	130	98.5	160	198	248	230	15.00	
2100/ED ZAWÓR KULOWY DIN NIKROTĘKA / GWINT (FE. / ME.)									
N°	DN	Frost	Amm	Bmm	Cmm	Dmm	Emm	kg	
1	10	20	10	20	70	75	58	0.30	
2	15	24	15	25	72	82	67	0.40	
3	20	44	20	40	85	92	70	0.50	
4	25	52	25	50	96	98	75	1.10	
5	32	58	32	58	98	120	101	1.60	
6	40	65	36	62	104	120	101	1.70	
7	50	78	45	78	115	153	120	2.80	
8	50	78	50	90	133	153	125	3.80	
9	60	85	57	100	138	153	130	4.40	
10	65	95	66	114	165	190	158	7.00	
11	80	110	76	133	184	248	193	10.20	
12	100	130	98.5	160	198	248	230	15.00	
2100/FD ZAWÓR KULOWY DIN SPRAW / GWINT (FE. / ME.)									
N°	DN	Frost	Amm	Bmm	Cmm	Dmm	Emm	kg	
1	10	20	10	20	70	75	58	0.30	
2	15	24	15	25	72	82	67	0.40	
3	20	44	20	40	85	92	70	0.50	
4	25	52	25	50	96	98	75	1.10	
5	32	58	32	58	98	120	101	1.60	
6	40	65	36	62	104	120	101	1.70	
7	50	78	45	78	115	153	120	2.80	
8	50	78	50	90	133	153	125	3.80	
9	60	85	57	100	138	153	130	4.40	
10	65	95	66	114	165	190	158	7.00	
11	80	110	76	133	184	248	193	10.20	
12	100	130	98.5	160	198	248	230	15.00	
2100/FF ZAWÓR KULOWY DIN SPRAW / SPRAW (FE. / FE.)									
N°	DN	Frost	Amm	Bmm	Cmm	Dmm	Emm	kg	
1	10	12	10	20	70	75	58	0.30	
2	15	18	15	25	70	82	67	0.40	
3	20	22	20	40	85	92	70	0.50	
4	25	28	25	50	90	98	75	0.80	
5	32	35	32	58	95	120	101	1.50	
6	40	40	36	62	104	120	101	1.50	
7	50	52	45	78	115	153	120	2.50	
8	50	54	50	90	133	153	125	2.50	
9	60	62	57	100	138	153	130	4.20	
10	65	70	66	114	165	190	158	6.50	
11	80	85	76	133	184	248	193	9.50	
12	100	104	98.5	160	197	248	230	13.50	
2100/AA ZAWÓR KULOWY BSP-GAS GWINT WE. / GWINT WE. (FE. / FE.)									
N°	G [cal]	Frost	Amm	Bmm	Cmm	Dmm	Emm	kg	
1	1/4	10	20	40	75	58	0.30		
2	1/2	12	28	40	75	58	0.30		
3	1 1/2	15	25	45	82	67	0.40		
4	3/4	20	40	85	92	70	0.50		
5	1	25	50	90	98	75	1.00		
6	1 1/4	32	57	94	120	101	1.70		
7	1 1/2	40	70	100	120	110	2.00		
8	2	50	90	120	153	125	3.80		
9	1 1/2	66	114	165	190	158	7.00		
10	3	76	133	172	248	193	10.80		
11	4	98.5	160	189	248	230	14.00		
2100/BA ZAWÓR KULOWY BSP-GAS GWINT ZE. / GWINT WE. (ME. / FE.)									
N°	G [cal]	Frost	Amm	Bmm	Cmm	Dmm	Emm	kg	
1	1/4	10	20	42	75	58	0.30		
2	1/2	12	28	42	75	58	0.30		
3	1 1/2	15	25	70	82	67	0.40		
4	3/4	20	40	85	92	70	0.50		
5	1	25	50	90	98	75	1.00		
6	1 1/4	32	57	94	120	101	1.70		
7	1 1/2	40	70	95	120	110	2.00		
8	2	50	90	121	153	126	3.80		
9	1 1/2	66	114	165	190	158	7.00		
10	3	76	133	176	248	193	10.80		
11	4	98.5	160	193	248	230	14.00		

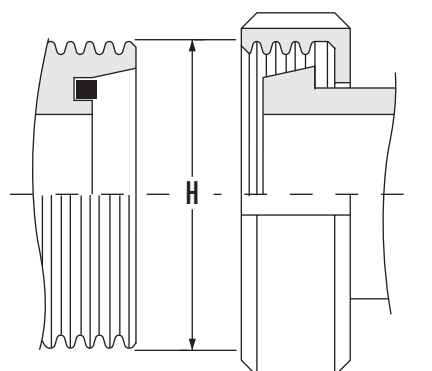
2100/DD ZAWÓR KULOWY DIN GWINT / GWINT (ME. / ME.)									
N°	DN	H (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)	
1	10	28	10	28	70	75	58	0.30	
2	15	34	15	35	72	82	67	0.40	
3	20	44	20	40	85	92	70	0.55	
4	25	52	25	50	96	98	75	1.10	
5	32	58	32	58	98	120	101	1.60	
6	40	65	36	62	104	120	101	1.70	
7	50	78	45	78	115	153	120	2.80	
8	50	78	50	90	133	153	125	3.80	
9	60	85	57	100	138	153	130	4.40	
10	65	95	66	114	165	190	158	7.00	
11	80	110	76	133	184	248	193	10.20	
12	100	130	98.5	160	198	248	230	15.00	

SYMBOL	OZNACZENIE
A	Nazwa kategorii
B	Nazwa podkategorii
C	Numer katalogowy oraz norma przyłącza (oznaczona kolorem)
D	Numer wykonawczy
E	Rysunek elementu
F	Tabela wymiarów
G	Nazwa produktu
H	Oznaczenia przyłącza

SYMBOL	ROZWINIĘCIE	PRZYŁĄCZE
PE.	PLAIN END	do przyspawania
ME.	MALE END	męskie
FE.	FEMALE END	żeńskie
CL.	CLAMP	
GR.	GAROLLA	

SYMBOL	NORMA
	DIN
	BSP-GAS
	SMS
	CLAMP
	GAROLLA / MACON / ENO
	NIE DOTYCZY

DIN DIN 11851

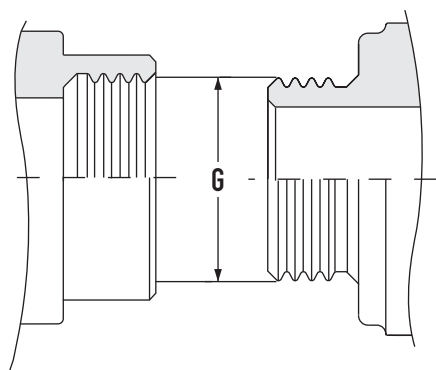


CZĘŚĆ MĘSKA
GWINT (ME.)

CZĘŚĆ ŻEŃSKA
STOŻEK + NAKRĘTKA (FE.)

DN	[mm x cal]
10	28 x 1/8
15	34 x 1/8
20	44 x 1/6
25	52 x 1/6
32	58 x 1/6
40	65 x 1/6
50	78 x 1/6
60	85 x 1/6
65	95 x 1/6
80	110 x 1/4
100	130 x 1/4
125	160 x 1/4
150	190 x 1/4

BSP-GAS UNI ISO 228

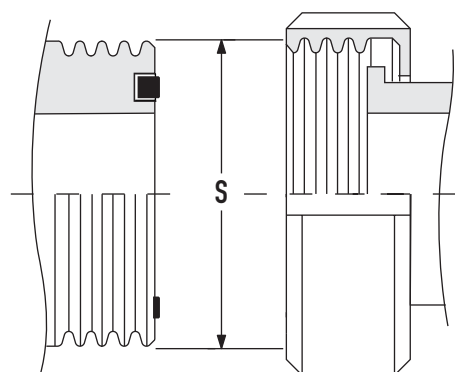


CZĘŚĆ ŻEŃSKA
GWINT WEW. (FE.)

CZĘŚĆ MĘSKA
GWINT ZEW. (ME.)

[mm]	[cal]
9.728	1/8
13.157	1/4
16.662	3/8
20.955	1/2
26.441	3/4
33.249	1
41.910	1 1/4
47.803	1 1/2
59.614	2
75.184	2 1/2
87.884	3
113.04	4
138.43	5

SMS SMS 1146

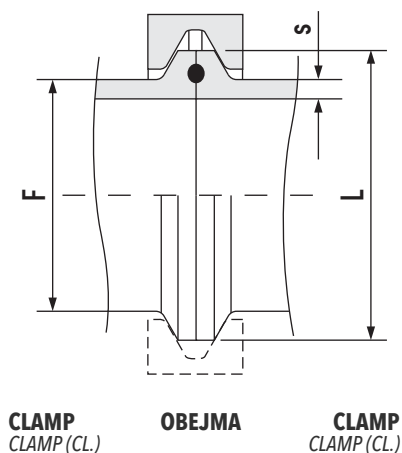


CZĘŚĆ MĘSKA
GWINT (ME.)

CZĘŚĆ ŻEŃSKA
STOŻEK + NAKRĘTKA (FE.)

DN	[cal]	S [mm x cal]
25	1	40 x 1/6
38	1 1/2	60 x 1/6
51	2	70 x 1/6
63	2 1/2	85 x 1/6
76	3	98 x 1/6
101	4	132 x 1/6
104	-	125 x 1/4

CLAMP BS 4825 / ISO 2852 / DIN 32676



	DN [cal]	L [mm]	F [mm]	S [mm]
BS 4825	1/2	25.1	12.7	1.65
	3/4	25.1	19.05	1.65
	1	50.4	25.4	1.65
	1 1/2	50.4	38.1	1.65
	2	64.0	50.8	1.65
	1 1/2	77.4	63.5	1.65
	3	90.9	76.1	1.65
	4	118.8	101.6	2.11
	6	167.0	152.4	2.77
	8	217.4	203.2	2.77
	10	268.5	254.0	3.56
	12	319.3	304.8	3.56

	DN	L [mm]	F [mm]	S [mm]
ISO 2852	10	34.0	17.2	1.6
	15	34.0	21.3	1.6
	20	50.4	26.9	1.6
	25	50.4	33.7	1.6
	32	50.4	42.4	1.6
	40	64.0	48.3	1.6
	50	77.4	60.3	2.0
	65	90.9	76.2	2.0
	80	106.0	88.9	2.0
	100	130.0	114.3	2.0
	125	155.0	139.7	3.0
	150	183.0	168.3	3.0
	200	233.5	219.1	3.0
	250	319.3	273.0	3.0

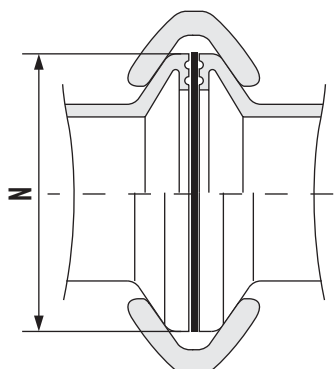
*Dla rur ISO 1127

	DN	L [mm]	F [mm]	S [mm]
DIN 32676	10	34.0	12	1.5
	15	34.0	18	1.5
	20	34.0	22	1.5
	25	50.4	28	1.5
	32	50.4	34	1.5
	40	50.4	40	1.5
	50	64.0	52	1.5
	65	90.9	70	2.0
	80	106.0	85	2.0
	100	118.8	104	2.0
	125	155.0	129	2.0
	150	183.0	154	2.0
	200	233.5	204	2.0
	250	268.5	254	3.0
	300	319.3	305	3.0

*Dla rur DIN 11850/1

GAROLLA / MACON / ENO

GAROLLA



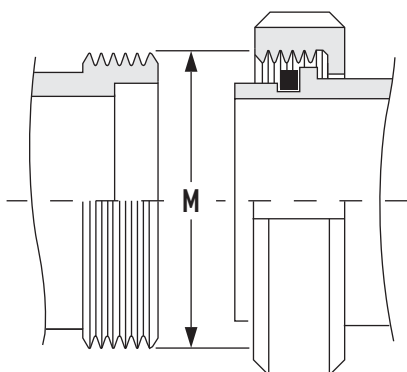
GAROLLA
GAROLLA (GR.)

OBEJMA

GAROLLA
GAROLLA (GR.)

DN	N [mm]
40	65
50	75
60	86
70	98
80	108
100	128
120	158
150	188

MACON

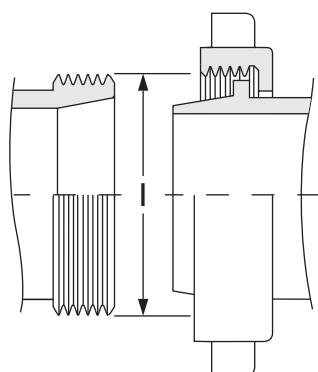


CZĘŚĆ MĘSKA
GWINT (ME.)

CZĘŚĆ ŻEŃSKA
STOŻEK + NAKRĘTKA (FE.)

DN	M [mm]
40	55 x 3
50	67 x 3
60	79 x 3.5
70	90 x 3.5
80	102 x 4
100	125 x 4
120	-

ENO



CZĘŚĆ MĘSKA
GWINT (ME.)

CZĘŚĆ ŻEŃSKA
STOŻEK + NAKRĘTKA (FE.)

DN	I [mm x cal]
25	37 x 1/8
30	41 x 1/8
35	46 x 1/8
40	51 x 1/8
50	66 x 1/8

2510/99

UCHWYT INOX
DLA SERII 2100 i 2200



N°	DLA DN	N°	DLA DN
1	12	5	40
2	15-20	6	45-50-57
3	25	7	66
4	36	8	76-99-120

2520/99

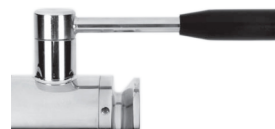
UCHWYT INOX
DLA SERII 2100 i 2200



N°	DLA DN	N°	DLA DN
1	12	5	40
2	15-20	6	45-50-57
3	25	7	66
4	36	8	76-99-120

2530/99

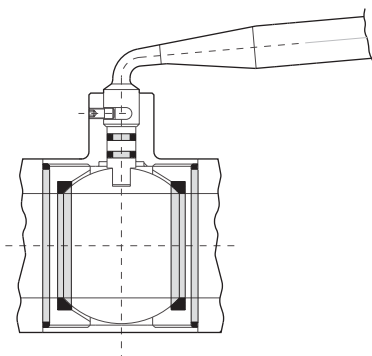
UCHWYT INOX
Z WYKOŃCZENIEM PLASTIKOWYM
DLA SERII 2100 i 2200



N°	DLA DN	N°	DLA DN
1	12	5	40
2	15-20	6	45-50-57
3	25	7	66
4	36	8	76-99-120

2190/99

USZCZELKI ZAWORU
ZESTAW
DLA SERII 2100

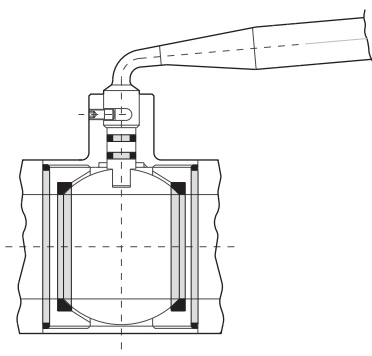


N°	DN	DIN	SMS	CLAMP	BSP-GAS	GAROLLA	MAÇON
1	12	10	-	1/2	1/4	-	-
2	15	15	-	3/4	1/2	-	-
3	20	20	-	-	3/4	-	-
4	25	25	25	1	1	40	40
5	36	32-40	38	1 1/2	1 1/4	40	40
6	40	-	-	-	1 1/2	-	-
7	45	50	51	2	-	50	50
8	50	50-60	-	-	2	60	60
9	57	60	63	2 1/2	-	60	60
10	66	65	76	3	2 1/2	70	70
11	76	80	-	-	3	80	80
12	99	100	101	4	4	100	100

DOSTĘPNE MATERIAŁY: NBR+PTFE / VITON+PTFE / EPDM+PTFE

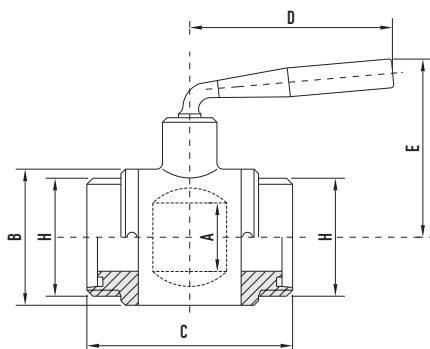
2290/99

USZCZELKI ZAWORU
ZESTAW
DLA SERII 2200

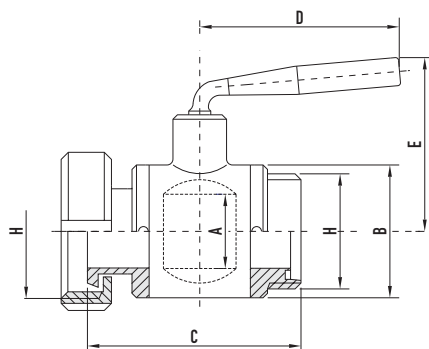


N°	DN	DIN	SMS	CLAMP	BSP-GAS	GAROLLA	MAÇON
1	25	25	25	1	1	-	-
2	36	32-40	38	1 1/2	1 1/4	40	40
3	45	50	51	2	1 1/2	50	50
4	50	50	-	-	2	-	-
5	57	60	63	2 1/2	-	60	60
6	66	65	76	3	2 1/2	70	70
7	76	80	-	-	3	80	80
8	99	100	101	4	4	100	100
9	120	125	-	5	5	-	-

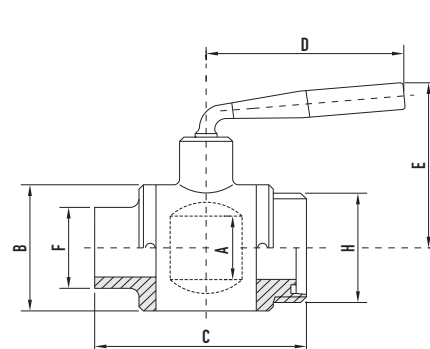
DOSTĘPNE MATERIAŁY: NBR+PTFE / VITON+PTFE / EPDM+PTFE

2100/DD
ZAWÓR KULOWY DIN
 GWINT / GWINT (ME. / ME.)


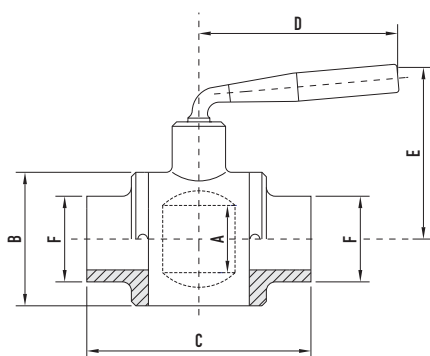
N°	DN	H [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	10	28	10	28	70	75	58	0.30
2	15	34	15	35	72	82	67	0.40
3	20	44	20	40	65	82	70	0.55
4	25	52	25	50	96	98	75	1.10
5	32	58	32	58	98	120	101	1.60
6	40	65	36	62	104	120	101	1.70
7	50	78	45	78	115	153	120	2.80
8	50	78	50	90	133	153	125	3.80
9	60	85	57	100	138	153	130	4.40
10	65	95	66	114	165	190	158	7.00
11	80	110	76	133	184	248	193	10.20
12	100	130	98.5	160	198	248	230	15.00

2100/ED
ZAWÓR KULOWY DIN
 NAKRĘTKA / GWINT (FE. / ME.)


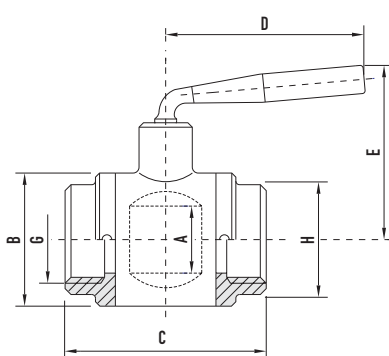
N°	DN	H [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	10	28	10	28	70	75	58	0.30
2	15	34	15	35	75	82	67	0.40
3	20	44	20	40	70	82	70	0.50
4	25	52	25	50	87	98	75	1.10
5	32	58	32	58	98	120	101	1.60
6	40	65	36	62	105	120	101	1.75
7	50	78	45	78	115	153	120	3.00
8	50	78	50	90	135	153	125	3.90
9	60	85	57	100	138	153	130	4.60
10	65	95	66	114	168	190	158	7.40
11	80	110	76	133	188	248	193	10.70
12	100	130	98.5	160	200	248	230	15.50

2100/FD
ZAWÓR KULOWY DIN
 SPAW / GWINT (PE. / ME.)


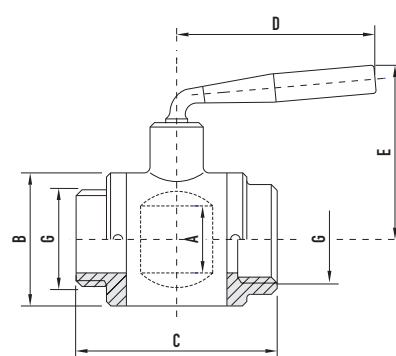
N°	DN	H [mm]	F [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	10	28	13	10	28	70	75	58	0.30
2	15	34	18	15	35	70	82	67	0.40
3	20	44	23	20	40	65	82	70	0.50
4	25	52	28	25	50	92	98	75	0.90
5	32	58	35	32	58	96	120	101	1.30
6	40	65	40	36	62	104	120	101	1.40
7	50	78	52	45	78	115	153	120	2.50
8	50	78	54	50	90	133	153	125	3.40
9	60	85	62	57	100	138	153	130	4.00
10	65	95	70	66	114	165	190	158	6.60
11	80	110	85	76	133	184	248	193	9.60
12	100	130	104	98.5	160	197.5	248	230	14.00

2100/FF
ZAWÓR KULOWY DIN
 SPAW / SPAW (PE. / PE.)


N°	DN	F [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	10	12	10	28	70	75	58	0.30
2	15	18	15	35	70	82	67	0.40
3	20	22	20	40	65	82	70	0.50
4	25	28	25	50	90	98	75	0.80
5	32	35	32	58	95	120	101	1.50
6	40	40	36	62	104	128	101	1.55
7	50	52	45	78	115	153	120	2.50
8	50	54	50	90	133	153	125	2.20
9	60	62	57	100	138	153	130	4.20
10	65	70	66	114	165	190	158	6.20
11	80	85	76	133	184	248	193	9.30
12	100	104	98.5	160	197	248	230	13.30

2100/AA
ZAWÓR KULOWY BSP-GAS
 GWINT WE. / GWINT WE. (FE. / FE.)


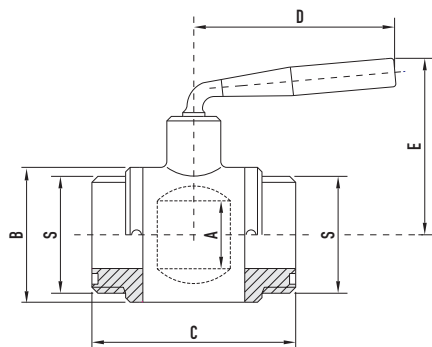
N°	G [cal]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	1/4	10	28	60	75	58	0.30
2	3/8	12	28	60	75	58	0.30
3	1/2	15	35	65	82	67	0.40
4	3/4	20	40	65	82	70	0.55
5	1	25	50	90	98	75	1.00
6	1 1/4	32	57	94	120	101	1.70
7	1 1/2	40	70	100	120	110	2.00
8	2	50	90	129	153	125	3.80
9	1 1/2	66	114	165	190	158	7.00
10	3	76	133	172	248	193	10.00
11	4	98.5	160	189	248	230	14.00

2100/BA
ZAWÓR KULOWY BSP-GAS
 GWINT ZE. / GWINT WE. (ME. / FE.)


N°	G [cal]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	1/4	10	28	62	75	58	0.30
2	3/8	10	28	62	75	58	0.30
3	1/2	15	35	70	82	67	0.40
4	3/4	20	40	65	82	70	0.55
5	1	25	50	80	98	75	1.00
6	1 1/4	32	57	100	120	101	1.70
7	1 1/2	40	70	95	120	110	2.00
8	2	50	90	131	153	126	3.80
9	1 1/2	66	114	165	190	158	7.00
10	3	76	133	178	248	193	10.00
11	4	98.5	160	193	248	230	14.00

2100/HH

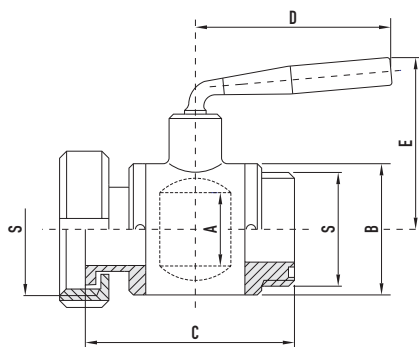
ZAWÓR KULOWY SMS
GWINT / GWINT (ME. / ME.)



N°	DN	S (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	25	40	25	50	96	98	75	1.10
2	38	60	36	62	104	120	101	1.70
3	51	70	45	78	115	153	120	2.80
4	63	85	57	90	138	153	130	4.40
5	76	98	66	114	165	190	158	7.00
6	101	132	98.5	160	198	248	230	15.00

2100/IH

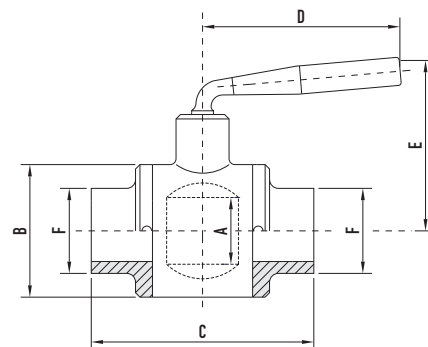
ZAWÓR KULOWY SMS
NAKRĘTKA / GWINT (FE. / ME.)



N°	DN	S (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	25	40	25	50	87	98	75	1.10
2	38	60	36	62	105	120	101	1.70
3	51	70	45	78	115	153	120	2.80
4	63	85	57	100	138	153	130	4.60
5	76	98	66	114	168	190	158	7.40
6	101	132	98.5	160	200	248	230	15.50

2100/JJ

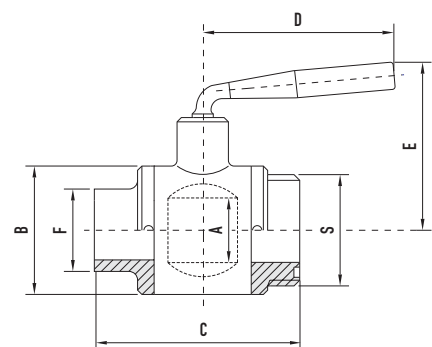
ZAWÓR KULOWY SMS
SPAW / SPAW (PE. / PE.)



N°	DN	F (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	25	25.4	25	50	88	98	75	0.80
2	38	38.1	36	62	104	120	101	1.50
3	51	50.8	45	78	115	153	120	2.50
4	63	63.5	57	100	138	153	130	4.00
5	76	76.1	66	114	165	190	158	6.20
6	101	101.6	98.5	160	197	248	230	13.30

2100/JH

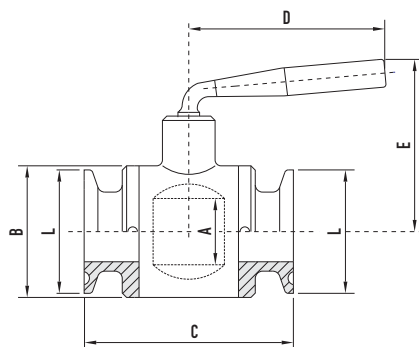
ZAWÓR KULOWY SMS
SPAW / GWINT (PE. / ME.)



N°	DN	F (mm)	S (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	25	25.4	40	25	50	87	98	75	0.95
2	38	38.1	60	36	62	104	120	101	1.60
3	51	50.8	70	45	78	115	153	120	2.65
4	63	63.5	85	57	100	138	153	130	4.20
5	76	76.1	98	66	114	165	190	158	6.60
6	101	101.6	132	98.5	160	197	248	230	14.10

2100/LL

ZAWÓR KULOWY CLAMP
CLAMP / CLAMP (CL. / CL.)



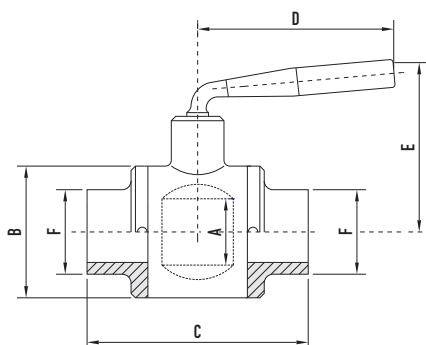
N°	DN	L (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	1/2	25.1	10	28	64	75	58	0.30
2	3/4	25.1	15	35	78	82	67	0.40
3	1	50.4	25	50	88	98	75	1.00
4	1 1/2	50.4	36	62	96	120	101	1.60
5	2	64	45	78	110	153	120	2.60
6	2 1/2	77.4	57	100	134	153	130	4.20
7	3	90.9	66	114	157	190	158	6.80
8	4	118.8	98.5	160	186	248	230	14.70

N°	DN	L (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
9	10	34	10	28	-	75	58	0.30
10	10	34	15	35	-	82	67	0.40
11	20	50.4	20	40	-	98	70	1.00
12	25	50.4	25	50	-	120	75	1.60
13	32	50.4	36	62	-	153	101	2.60
14	40	64	44	78	-	153	120	4.20
15	50	77.4	56	100	-	190	120	6.80
16	65	90.9	66	114	-	248	158	14.70
17	80	106	76	133	-	248	193	14.70
18	100	130	99	160	-	248	230	14.70

N°	DN	L (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
19	10	34	10	28	-	75	58	0.30
20	15	34	15	35	-	82	67	0.40
21	20	34	20	40	-	82	70	1.00
22	25	50.4	25	50	-	98	75	1.60
23	32	50.4	32	58	-	120	101	2.60
24	40	50.4	36	62	-	120	120	4.20
25	50	64	50	90	-	153	120	6.80
26	65	90.9	66	114	-	120	158	14.70
27	80	106	76	133	-	248	193	14.70
28	100	118.8	99	160	-	248	230	14.70

2100/MM

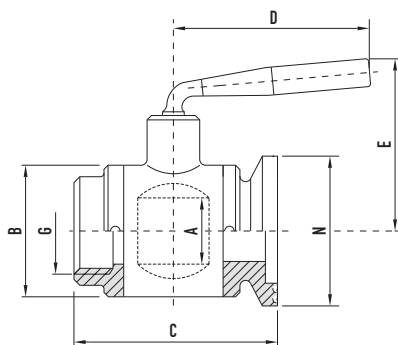
ZAWÓR KULOWY CLAMP
SPAŁ / SPAŁ (PE. / PE.)



N°	DN [cal]	F [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	1/2	12.7	10	28	64	75	58	0.30
2	3/4	19.1	15	35	78	82	67	0.40
3	1	25.4	25	50	88	98	75	0.80
4	1 1/2	38.1	36	62	104	120	101	1.50
5	2	50.8	45	78	115	153	120	2.50
6	2 1/2	63.5	57	100	138	153	130	4.10
7	3	76.1	66	114	165	190	158	6.20
8	4	101.6	98.5	160	197	248	230	13.30

2100/AU

ZAWÓR KULOWY
BSP-GAS / GAROLLA
GWINT WEW. / GAROLLA (FE. / GR.)



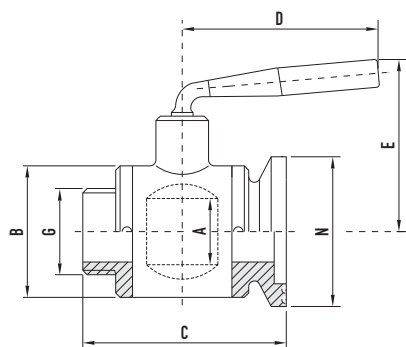
N°	DN [GAROLLA]	G [cal]	A [mm]	N [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	40	1	25	65	50	92	98	75	1.10
2	40	1 1/4	32	65	58	95	110	95	1.40
3	40	1 1/4	36	65	62	100	120	101	1.60
4	40	1 1/2	36	65	62	100	120	101	1.60
5	40	1 1/2	40	65	70	105	120	110	1.90
6	50	1 1/4	36	75	62	100	120	101	1.60
7	50	1 1/2	36	75	62	100	120	101	1.60
8	50	1 1/2	40	75	70	105	120	110	1.90
9	50	2	45	75	80	115	140	120	2.60



N°	DN [GAROLLA]	G [cal]	A [mm]	N [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
10	50	2	50	75	90	125	153	125	2.60
11	60	2	50	86	90	125	153	125	3.80
12	60	2 1/2	56	86	100	138	153	130	4.60
13	70	2 1/2	66	98	115	160	190	158	6.90
14	80	2 1/2	66	108	115	160	190	158	6.90
15	80	3	76	108	133	170	248	193	9.80
16	100	3 1/2	99	128	133	190	248	230	14.00
17	100	4	99	128	160	190	248	230	14.00

2100/BU

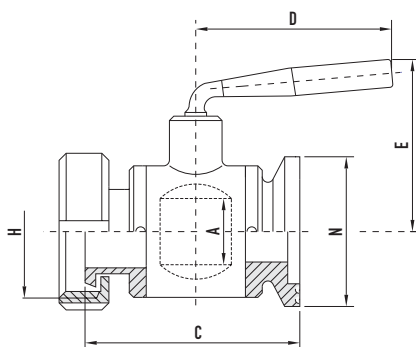
ZAWÓR KULOWY
BSP-GAS / GAROLLA
GWINT ZEŁ. / GAROLLA (ME. / GR.)



N°	DN [GAROLLA]	G [cal]	A [mm]	N [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	40	1	25	65	50	92	98	75	1.10
2	40	1 1/4	32	65	58	95	110	95	1.40
3	40	1 1/4	36	65	62	100	120	101	1.60
4	40	1 1/2	36	65	62	100	120	101	1.60
5	40	1 1/2	40	65	70	105	120	110	1.90
6	50	1 1/4	36	75	62	100	120	101	1.60
7	50	1 1/2	36	75	62	100	120	101	1.60
8	50	1 1/2	40	75	70	105	120	110	1.90

2100/EU

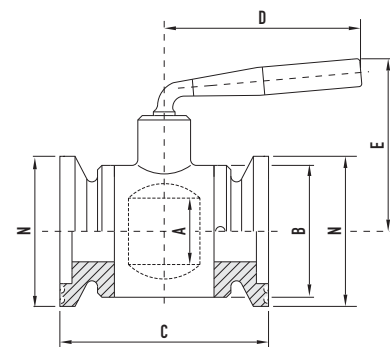
ZAWÓR KULOWY
DIN / GAROLLA
NAKRĘTKA / GAROLLA (FE. / GR.)



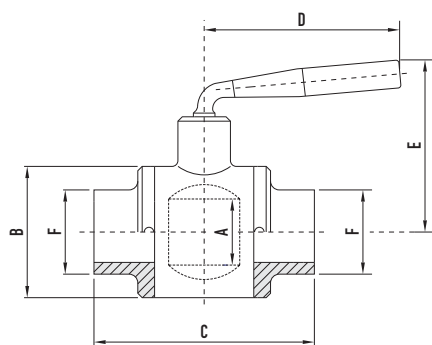
N°	DN [GAROLLA]	DN [DIN]	A [mm]	N [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	40	32	32	65	58	-	110	95	1.50
2	40	40	36	65	62	-	120	101	1.75
3	40	40	40	65	70	-	120	110	2.10
4	50	40	36	75	62	-	120	101	2.00
5	50	40	40	75	70	-	120	110	2.20
6	50	50	45	75	80	-	140	120	3.00
7	50	50	50	75	90	-	153	125	3.80
8	60	50	50	86	90	-	153	125	3.90
9	60	65	56	86	100	-	153	130	4.60
10	70	65	66	98	115	-	190	158	7.40
11	80	80	66	108	115	-	190	158	7.90
12	80	80	76	108	133	-	248	193	10.50
13	100	100	99	108	160	-	248	230	15.00

2100/UU

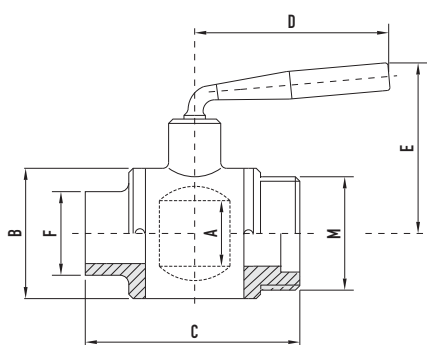
ZAWÓR KULOWY GAROLLA
GAROLLA / GAROLLA (GR. / GR.)



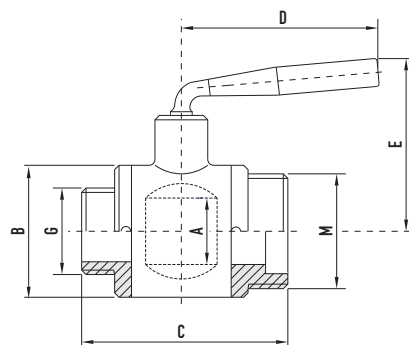
N°	DN [GAROLLA]	A [mm]	N [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	40	36	65	62	104	120	101	1.60
2	50	45	75	78	115	153	120	2.60
3	60	50	86	90	126	153	125	3.80
4	60	57	86	100	126	153	125	4.70
5	70	66	98	114	155	190	158	6.90
6	80	76	108	133	168	248	193	9.80
7	100	98.5	128	160	191	248	230	14.00

2100/RR
ZAWÓR KULOWY MAÇON
 SPAW / SPAW (PE. / PE.)


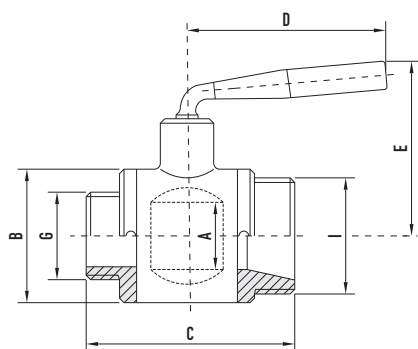
N°	DN [MAÇON]	F [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	40	43	36	62	104	120	101	1.55
2	50	53	45	78	115	153	120	2.50
3	50	53	50	90	133	153	125	3.20
4	60	63	57	100	147	153	125	4.00
5	70	73	66	114	165	190	158	6.20
6	80	83	76	133	184	248	193	9.10
7	100	104	98.5	160	199	248	230	13.00

2100/RQ
ZAWÓR KULOWY MAÇON
 SPAW / GWINT ZEW. (PE. / ME.)


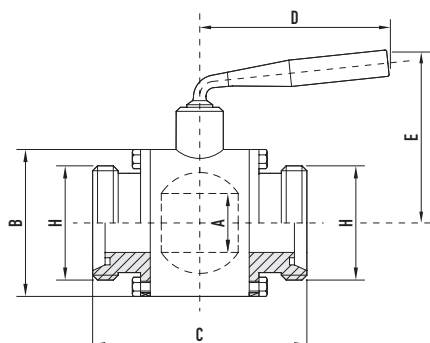
N°	DN [MAÇON]	F [mm]	A [mm]	M [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	40	43	36	55	62	104	120	101	1.60
2	40	43	40	55	70	-	120	110	2.00
3	50	53	50	67	90	-	153	125	3.00
4	50	53	45	67	78	115	153	120	2.55
5	60	63	57	79	100	138	153	130	4.20
6	70	73	66	89	114	165	190	158	6.30
7	80	83	76	102	133	184	248	193	9.60
8	100	103	98.5	125	160	199	248	230	14.00

2100/BQ
ZAWÓR KULOWY
 BSP-GAS / MAÇON
 GWINT ZEW. / GWINT ZEW. (ME. / ME.)


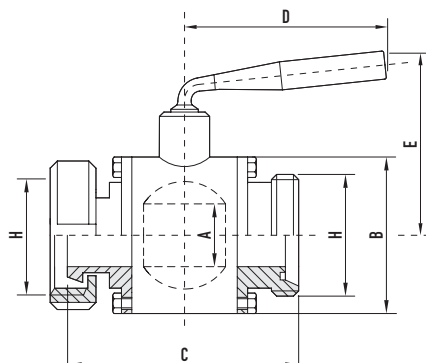
N°	DN [MAÇON]	G [cal]	A [mm]	M [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	40	1	25	55	50	92	98	75	1.10
2	40	1 1/4	36	55	62	104	120	101	1.70
3	40	1 1/2	36	55	62	100	120	101	1.70
4	50	1 1/2	40	67	70	-	120	110	2.10
5	50	2	45	67	78	115	153	120	2.60
6	60	2	57	79	100	147	153	130	4.30
7	70	2 1/2	66	89	114	165	190	158	6.30
8	80	3	76	102	133	184	248	193	9.80
9	100	4	98.5	125	160	199	248	230	14.40

2100/BN
ZAWÓR KULOWY
 BSP-GAS / ENO
 GWINT ZEW. / GWINT ZEW. (ME. / ME.)


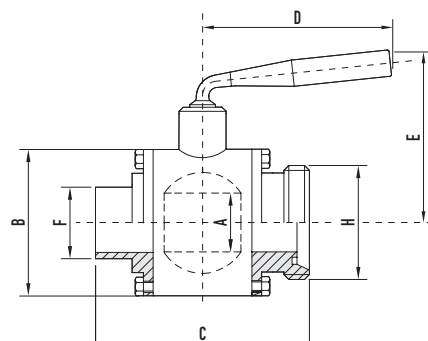
N°	DN [ENO]	G [cal]	A [mm]	I [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	30	3/4	20	41	40	65	82	70	0.90
2	25	3/4	20	37	40	65	82	70	0.80
3	30	1	25	41	50	90	98	75	1.00
4	40	1	25	51	50	90	98	75	1.20
5	35	1	25	46	50	90	98	75	1.10
6	40	1 1/4	36	51	62	104	120	101	1.70
7	50	1 1/2	40	66	70	105	120	110	2.40

2200/DD
ZAWÓR KULOWY DIN
 GWINT / GWINT (ME. / ME.)


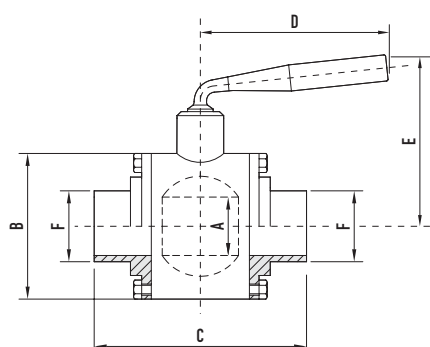
N°	DN	H [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	25	52	25	57	83	98	75	1.10
2	32	58	32	75	97	120	101	1.75
3	40	65	36	75	105	120	101	1.80
4	50	78	45	91	112	153	120	3.00
5	50	78	50	103	121	153	125	3.95
6	60	85	57	111	128	153	130	4.70
7	65	95	66	126	147	190	158	7.00
8	80	110	76	143	162	248	193	10.10
9	100	130	98.5	172	185	248	230	15.00
10	125	160	120	205	210	248	250	17.60

2200/ED
ZAWÓR KULOWY DIN
 NAKRĘTKA / GWINT (FE. / ME.)


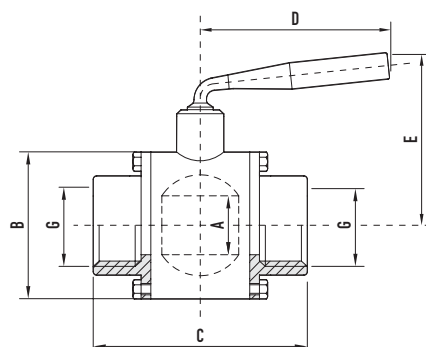
N°	DN	H [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	25	52	25	57	87	98	75	1.40
2	32	58	32	75	96	120	101	1.90
3	40	65	36	75	106	120	101	2.00
4	50	78	45	91	110	153	120	3.35
5	50	78	50	103	121	153	125	4.30
6	60	85	57	111	128	153	130	5.00
7	65	95	66	126	147	190	158	7.40
8	80	110	76	143	162	248	193	10.80
9	100	130	98.5	172	185	248	230	15.50
10	125	160	120	205	210	248	250	19.00

2200/FD
ZAWÓR KULOWY DIN
 SPAW / GWINT (PE. / ME.)


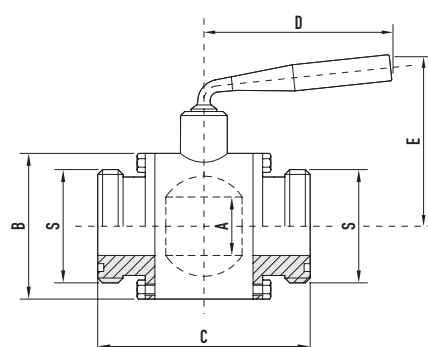
N°	DN	H [mm]	F [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	25	52	28	25	57	87	98	75	1.10
2	32	58	35	32	75	96	120	101	1.60
3	40	65	40	36	75	106	120	101	1.65
4	50	78	52	45	91	110	153	120	2.85
5	50	78	54	50	103	121	153	125	3.80
6	60	85	60	57	111	128	153	130	4.50
7	65	95	70	66	126	147	190	158	6.70
8	80	110	85	76	143	162	248	193	9.70
9	100	130	104	98.5	172	185	248	230	14.20
10	125	160	129	120	205	210	248	250	16.50

2200/FF
ZAWÓR KULOWY DIN
 SPAW / SPAW (PE. / PE.)


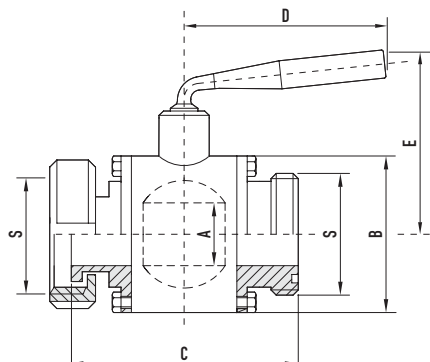
N°	DN	F [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	25	28	25	57	73	98	75	1.10
2	32	34	32	75	94	120	101	1.40
3	40	40	36	75	94	120	101	1.40
4	50	52	45	91	108	153	120	2.70
5	50	52	50	103	121	153	125	3.60
6	60	60	57	111	128	153	130	4.35
7	65	70	66	126	147	190	158	6.40
8	80	85	76	143	162	248	193	9.35
9	100	104	98	172	185	248	230	13.50
10	125	129	120	205	210	248	250	15.20

2200/AA
ZAWÓR KULOWY BSP-GAS
 GWINT WE. / GWINT WE. (FE. / FE.)


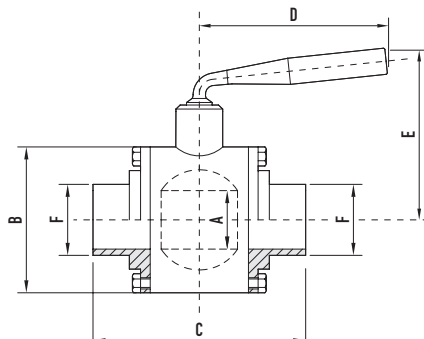
N°	G [cal]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	1	25	57	65	98	75	1.10
2	1 1/4	36	75	91	120	101	1.60
3	1 1/2	45	91	104	153	120	3.10
4	2	50	103	121	153	125	4.20
5	2 1/2	66	126	147	190	158	6.70
6	3	76	143	162	248	193	9.80
7	4	98	172	185	248	230	14.10
8	5	120	205	210	248	230	15.50

2200/HH
ZAWÓR KULOWY SMS
 GWINT / GWINT (ME. / ME.)


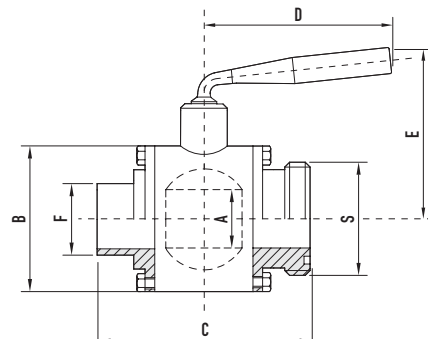
N°	DN	S [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	[kg]
1	25	40	25	57	73	98	75	1.10
2	38	60	36	75	94	120	101	1.80
3	51	70	45	91	108	153	120	3.15
4	63	85	57	111	128	153	130	4.70
5	76	98	66	126	147	190	158	7.10
6	101	132	98.5	172	185	248	230	15.00

2200/IH
ZAWÓR KULOWY SMS
 NAKRĘTKA / GWINT (FE. / ME.)


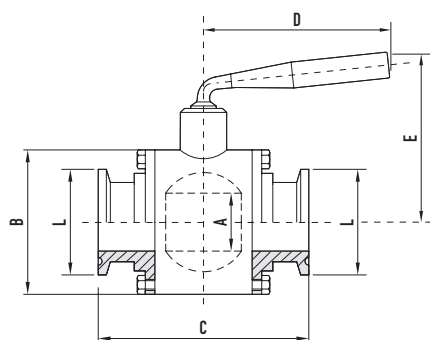
N°	DN	S (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	25	40	25	57	73	98	75	1.40
2	38	60	36	75	94	120	101	1.90
3	51	70	45	91	108	153	120	3.35
4	63	85	57	111	128	153	130	5.00
5	76	98	66	126	147	190	158	7.50
6	101	132	98.5	172	185	248	230	15.50

2200/JJ
ZAWÓR KULOWY SMS
 SPAW / SPAW (PE. / PE.)


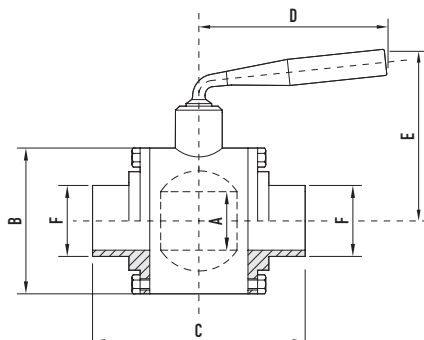
N°	DN	F (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	25	25.4	25	57	73	98	75	1.10
2	38	38.1	36	75	94	120	101	1.40
3	51	50.8	45	91	108	153	120	2.70
4	63	63.5	57	111	128	153	130	4.35
5	76	76.1	66	126	147	190	158	6.40
6	101	101.6	98.5	170	185	248	230	13.50

2200/JH
ZAWÓR KULOWY SMS
 SPAW / GWINT (PE. / ME.)


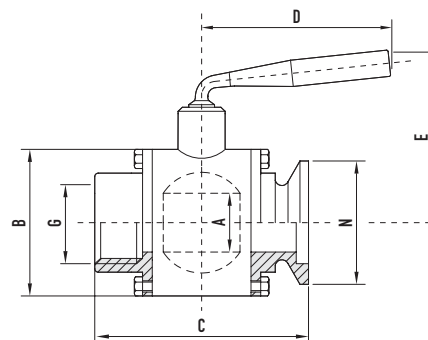
N°	DN	F (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	25	25.4	25	57	73	98	75	1.10
2	38	38.1	36	75	94	120	101	1.60
3	51	50.8	45	91	108	153	120	2.65
4	63	63.5	57	111	128	153	130	2.80
5	76	76.1	66	126	147	190	158	4.50
6	101	101.6	98	172	185	248	230	14.20

2200/LL
ZAWÓR KULOWY CLAMP
 CLAMP / CLAMP (CL. / CL.)


N°	DN [cal]	L (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	1	50.4	25	57	71	98	75	1.13
2	1 1/2	50.4	36	75	90	120	101	1.50
3	2	64	45	91	104	153	120	2.90
4	2 1/2	77.4	57	111	124	153	130	4.70
5	3	90.9	66	126	143	190	158	6.80
6	4	118.8	98.5	172	179	248	230	13.70
7	5	155	120	205	-	248	250	16.40

2200/MM
ZAWÓR KULOWY CLAMP
 SPAW / SPAW (PE. / PE.)


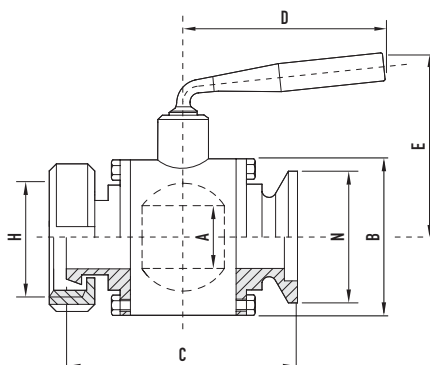
N°	DN (cal)	F (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	1	25.4	25	57	73	98	75	1.10
2	1 1/2	38.1	36	75	94	120	101	1.40
3	2	50.8	45	91	108	153	120	2.70
4	2 1/2	63.5	57	111	128	153	130	4.35
5	3	76.1	66	126	147	190	158	6.40
6	4	101.6	98.5	172	185	248	230	13.50
7	5	129	120	205	-	248	250	16.00

2200/AU
ZAWÓR KULOWY
BSP-GAS / GAROLLA
 GWINT WEW. / GAROLLA (FE. / GR.)


N°	DN	G [cal]	A (mm)	N (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	40	1 1/4	36	65	75	90	120	101	1.70
2	40	1 1/2	36	65	75	90	120	101	1.70
3	50	1 1/2	45	75	91	100	153	120	3.10
4	50	2	45	75	91	100	153	120	3.10
5	60	2	50	86	103	114	153	125	4.30
6	70	2 1/2	66	98	126	140	190	158	6.90
7	80	3	76	108	143	154	248	193	10.10
8	100	4	98.5	128	172	175	248	230	14.50
9	120	4	110	158	195	-	248	240	-
10	120	5	120	158	205	202	248	250	16.50

2200/EU

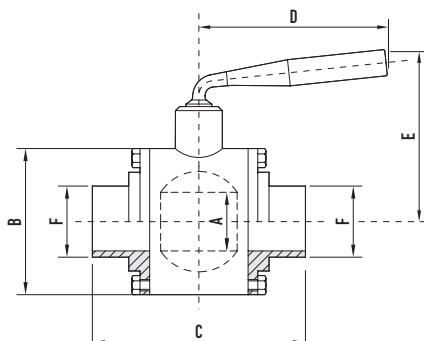
**ZAWÓR KULOWY
DIN / GAROLLA**
NAKRĘTKA / GAROLLA (FE. / GR.)



N°	DN (GAROLLA)	DN (DIN)	A (mm)	N (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	40	40	36	65	75	102	120	101	-
2	50	50	45	75	91	105	153	120	-
3	60	50	50	86	103	118	153	125	-
4	60	60	57	86	111	126	153	130	-
5	70	65	66	98	126	145	190	158	-
6	80	80	76	108	143	160	248	193	-
7	100	100	98.5	128	172	182	248	230	-
8	120	125	120	158	205	204	248	250	-

2200/RR

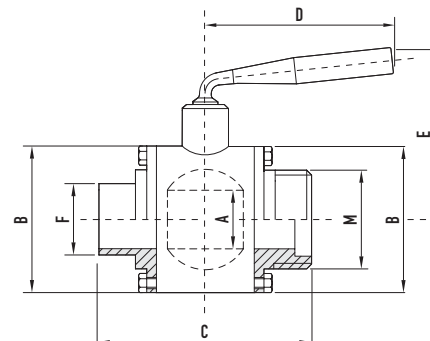
ZAWÓR KULOWY MAÇON
SPAŁ / SPAŁ (PE. / PE.)



N°	DN (MAÇON)	F (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	40	43	38	80	93	120	101	1.40
2	50	53	45	91	108	153	120	2.70
3	50	53	50	103	125	153	125	3.60
4	60	63	57	111	128	153	130	4.35
5	70	73	66	126	147	190	158	6.40
6	80	85	76	143	162	248	193	9.35
7	100	104	98.5	172	185	248	230	13.50
8	120	125	120	205	210	248	250	15.20

2200/RQ

ZAWÓR KULOWY MAÇON
SPAŁ / GWINT ZEW. (PE. / ME.)



N°	DN (MAÇON)	F (mm)	A (mm)	M (mm)	B (mm)	C (mm)	D (mm)	E (mm)	(kg)
1	40	43	36	55	75	93	120	101	1.50
2	50	53	45	67	91	108	153	120	2.85
3	50	53	50	67	103	-	153	125	-
4	60	63	57	79	126	128	153	130	4.50
5	70	73	66	89	143	147	190	158	6.70
6	80	85	76	102	172	162	248	198	9.80
7	100	104	98.5	125	205	186	248	230	14.20