



PP-RCT **VALVES**

PRODUCT CATALOG

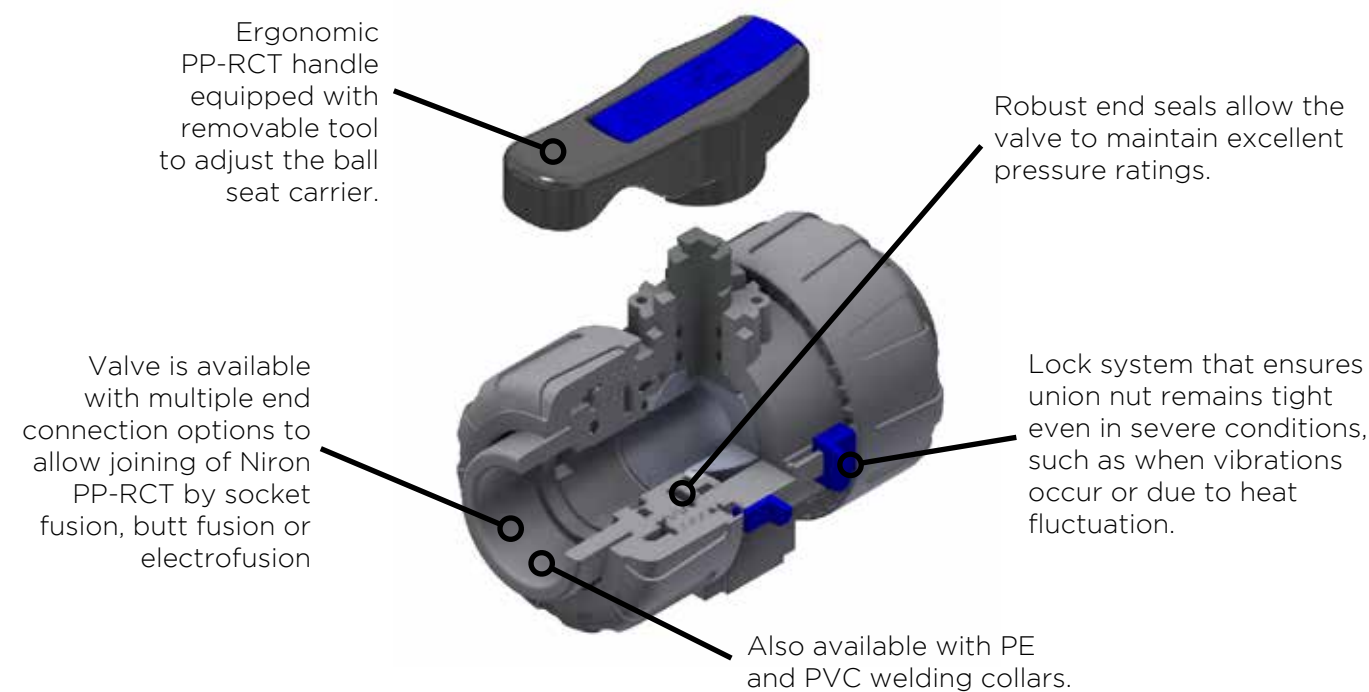
approved for potable water



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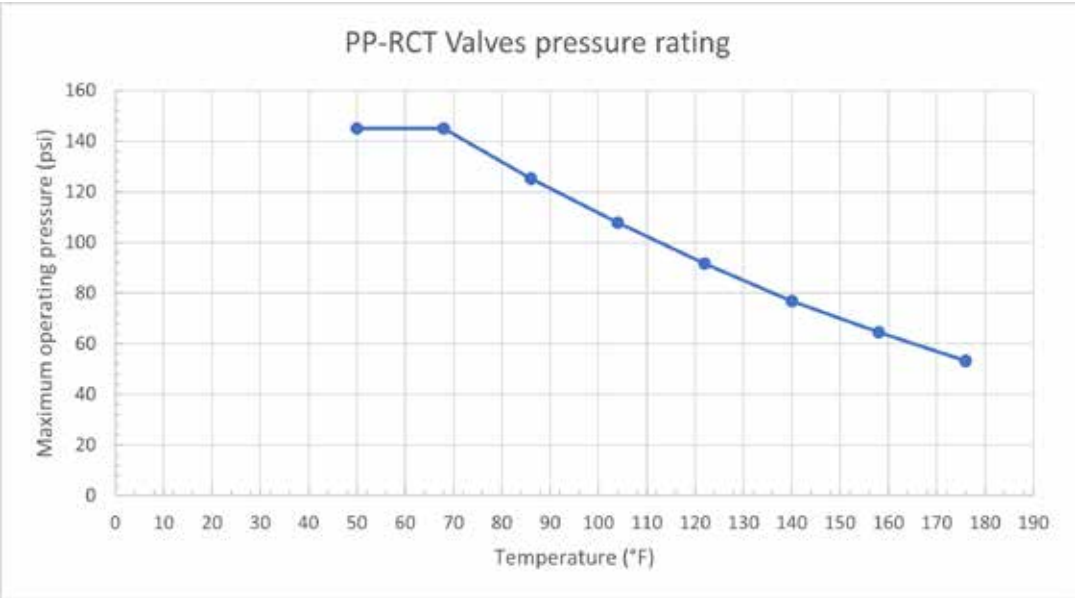
1. TRUE UNION PP-RCT BALL VALVE FEATURES & ADVANTAGES



1.1 TECHNICAL SPECIFICATIONS

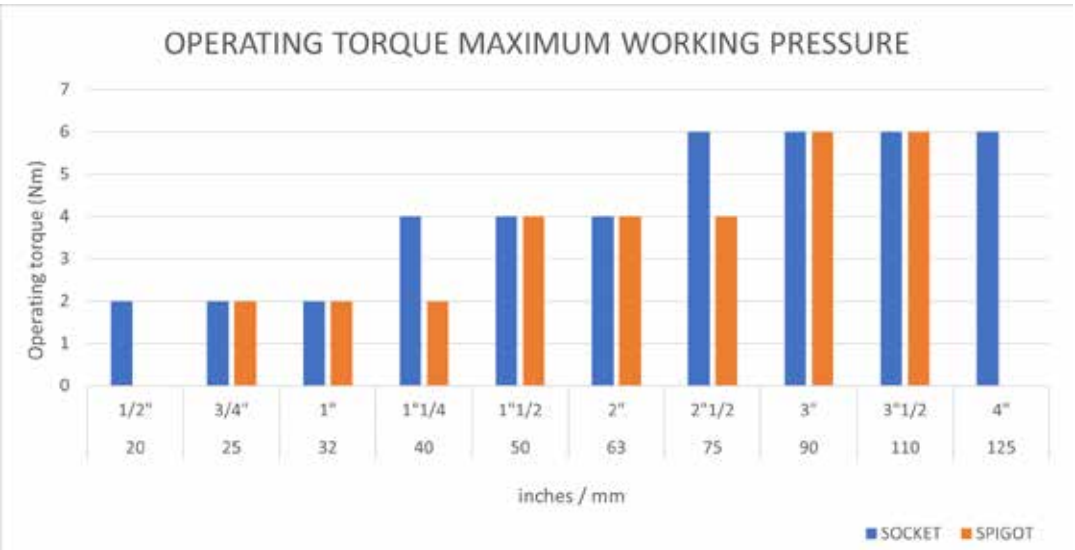
CONSTRUCTION	2-way ball valve with locking rings
VALVE MATERIAL	PP-RCT
SEAL MATERIAL	EPDM, (standard size O-Ring) PTFE (ball seats)
SIZE RANGE	1/2" - 3/4" - 1" - 1 1/4" - 1 1/2" - 2" - 3" - 3 1/2"socket fusion 3/4" - 1" - 1 1/4" - 1 1/2" - 2" - 2 1/2" spigot end
NOMINAL PRESSURE	PN 10 with water at +68°F
TEMPERATURE RANGE	+32° F ÷ +176° F
HYGIENIC LAW AND SPECIFICATIONS	NSF 61 (Drinking Water System Components - Health Effects). D.M. 174: (Italy: Ministry of Health. Regulations concerning materials and objects that can be used in fixed systems for collection, treatment, adduction and distribution of water intended for human consumption).
COUPLING STANDARDS	Coupled with pipes according to EN ISO 15494 (Plastics Piping Systems For Industrial Applications), EN ISO 15874 (Plastics Piping Systems For Hot And Cold Water Installations), ASTM F2389 (Standard Specifications For Pressure-Rated Polypropylene (Pp) Piping Systems)
CONTROL OPTIONS	Manual control

1.2 PRESSURE VARIATION ACCORDING TO TEMPERATURE

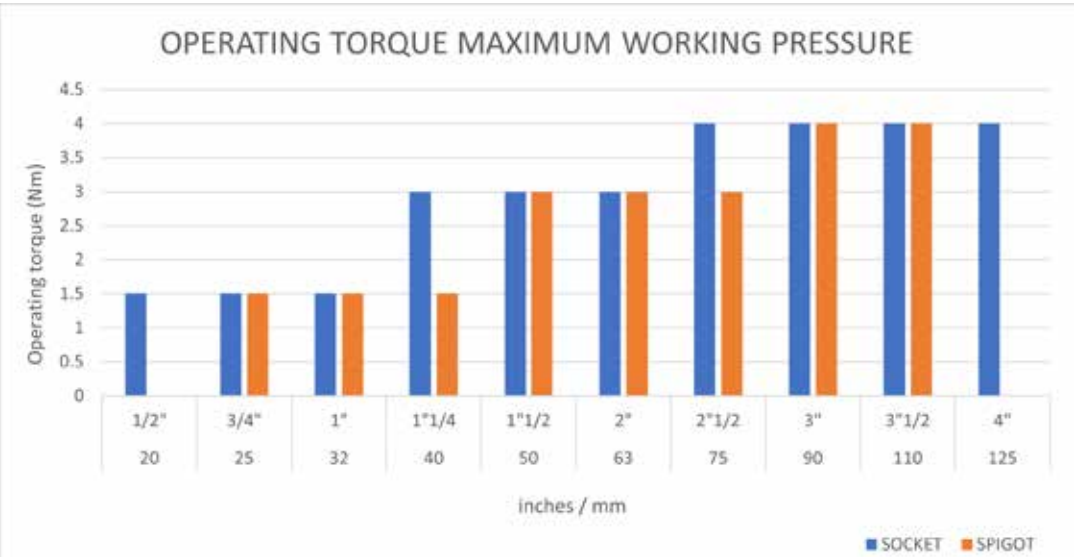


1.3 OPERATING TORQUE AT MAXIMUM WORKING PRESSURE

COLD WATER
73.4°F



HOT WATER
176°F





(A)



(B)

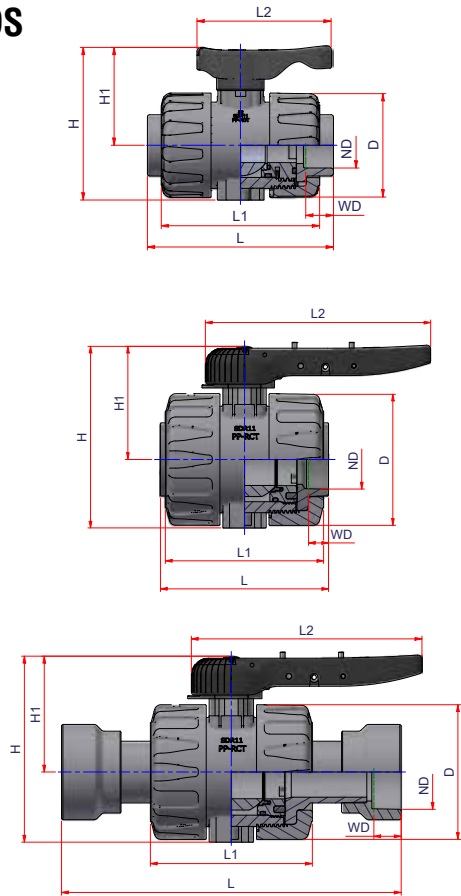


(C)



**PP-RCT TRUE UNION BALL VALVE
WITH SOCKET FUSION ENDS**

Material: PP-RCT
Range: ½" ÷ 2"
Note: Available in blue or red version



Code	Size	Carton Qty	Body Size	Body Type	ND	L2	L1	L	D	H1	H
27NRSPPRCT20	½"	1	1"	A	½" => 20 mm	3.64	4.29	4.88	2.82	2.70	4.17
27NRSPPRCT25	¾"	1	1"	A	¾" => 25 mm	3.64	4.29	4.96	2.82	2.70	4.17
27NRSPPRCT32	1"	1	1"	A	1" => 32 mm	3.64	4.29	5.04	2.82	2.70	4.17
27NRSPPRCT40	1 ¼"	1	2"	A	1 ¼" => 40 mm	5.28	6.04	6.95	4.80	4.33	6.81
27NRSPPRCT50	1 ½"	1	2"	A	1 ½" => 50 mm	5.28	6.04	7.26	4.80	4.33	6.81
27NRSPPRCT63	2"	1	2"	A	2" => 63 mm	5.28	6.04	7.76	4.80	4.33	6.81
27NRSPPRCT75	2 ½"	1	3"	A	2 ½" => 75 mm	13.35	9.37	9.37	7.8	6.93	10.98
27NRSPPRCT90	3"	1	3"	B	3" => 90 mm	13.35	9.37	9.37	7.8	6.93	10.98
27NRSPPRCT110	3 ½"	1	3"	C	3 ½" => 110 mm	13.35	9.37	9.37	7.8	6.93	10.98
27NRSPPRCT125	4"	1	3"	C	4" => 125 mm	13.35	9.37	9.37	7.8	6.93	10.98



(A)



(B)

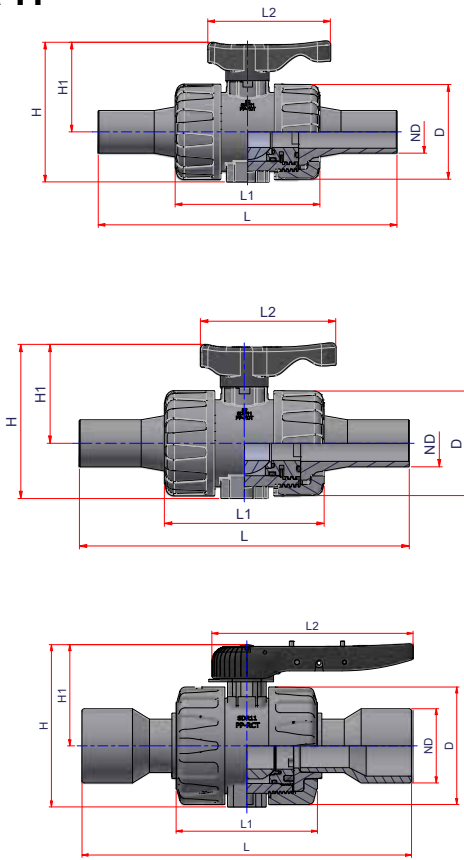


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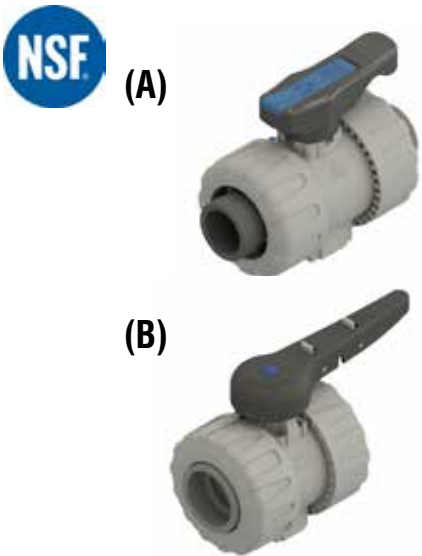


**PP-RCT TRUE UNION BALL VALVE
WITH SPIGOT ENDS - SDR 11**

Material: PP-RCT
Range: ¾" ÷ 2½"
Note: Available in blue or red version

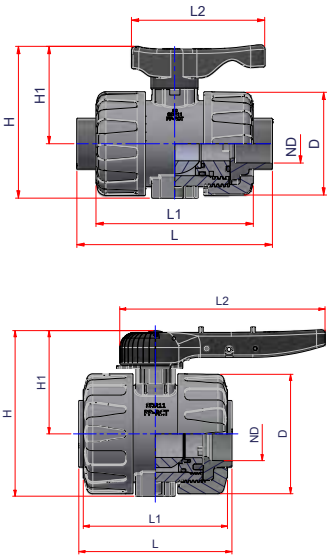


Code	Size	Carton Qty	Body Size	Body Type	ND	L2	L1	L	D	H1	H
27NRSPPRCTS25	¾"	1	1"	A	¾" => 25 mm	3.64	4.29	9.25	2.82	2.70	4.17
27NRSPPRCTS32	1"	1	1"	A	1" => 32 mm	3.64	4.29	9.02	2.82	2.70	4.17
27NRSPPRCTS40	1 ¼"	1	1"	A	1 ¼" => 40 mm	3.64	4.29	10.67	2.82	2.70	4.17
27NRSPPRCTS50	1 ½"	1	2"	A	1 ½" => 50 mm	5.28	6.04	12.00	4.80	4.33	6.81
27NRSPPRCTS63	2"	1	2"	A	2" => 63 mm	5.28	6.04	13.58	4.80	4.33	6.81
27NRSPPRCTS75	2 ½"	1	2"	A	2 ½" => 75 mm	5.28	6.04	13.54	4.80	4.33	6.81
27NRSPPRCTS90	3"	1	3"	B	3" => 90 mm	13.35	9.37	15.67	7.80	6.93	10.98
27NRSPPRCTS110	3 ½"	1	3"	B	3 ½" => 110 mm	13.35	9.37	16.22	7.80	6.93	10.98
27NRSPPRCTS125	4"	1	3"	C	4" => 125 mm	13.35	9.37	21.85	7.80	6.93	10.98

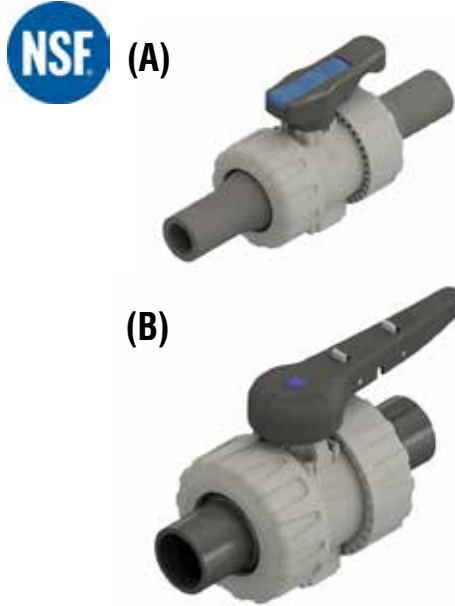


PP-RCT TRUE UNION BALL VALVE
WITH PVC SOLVENT CEMENT ENDS

Material: PP-RCT+ PVC
Range: ½" ÷ 2"
Note: Available in blue or red version

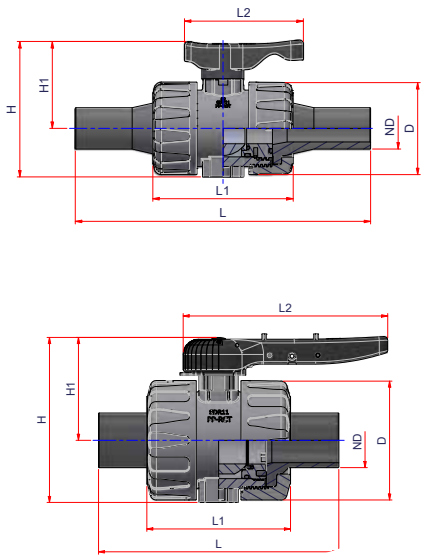


Code	Size	Carton Qty	Body Size	Body Type	ND	L2	L1	L	D	H1	H
27NRSPPRCT12PVC	½"	1	1"	A	½"=> 20 mm	3.64	4.29	4.88	2.82	2.70	4.17
27NRSPPRCT34PVC	¾"	1	1"	A	¾"=> 25 mm	3.64	4.29	4.96	2.82	2.70	4.17
27NRSPPRCT1PVC	1"	1	1"	A	1"=> 32 mm	3.64	4.29	5.04	2.82	2.70	4.17
27NRSPPRCT114PVC	1 ¼"	1	2"	A	1¼"=> 40 mm	5.28	6.04	6.95	4.8	4.33	6.81
27NRSPPRCT112PVC	1 ½"	1	2"	A	1½"=> 50 mm	5.28	6.04	7.26	4.8	4.33	6.81
27NRSPPRCT2PVC	2"	1	2"	A	2"=> 63 mm	5.28	6.04	7.76	4.8	4.33	6.81
27NRSPPRCT212PVC	2 ½"	1	2"	A	2½"=> 75 mm	13.35	9.37	9.61	7.8	6.93	10.98
27NRSPPRCT3PVC	3"	1	3"	B	3"=> 90 mm	13.35	9.37	9.96	7.8	6.93	10.98



PP-RCT TRUE UNION BALL VALVE
WITH PE SPIGOT ENDS - SDR 11

Material: PP-RCT
Range: ¾" ÷ 2½"
Note: Available in blue or red version



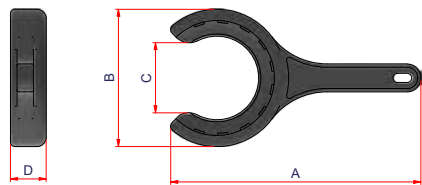
Code	Size	Carton Qty	Body Size	Body Type	ND	L2	L1	L	D	H1	H
27NRSPPRCTS34PE	¾"	1	1"	A	¾"=> 25 mm	3.64	4.29	9.25	2.82	2.70	4.17
27NRSPPRCTS1PE	1"	1	1"	A	1"=> 32 mm	3.64	4.29	9.02	2.82	2.70	4.17
27NRSPPRCTS114PE	1 ¼"	1	1"	A	1¼"=> 40 mm	3.64	4.29	10.67	2.82	2.70	4.17
27NRSPPRCTS112PE	1 ½"	1	2"	A	1½"=> 50 mm	5.28	6.04	12.00	4.80	4.33	6.81
27NRSPPRCTS2PE	2"	1	2"	A	2"=> 63 mm	5.28	6.04	13.58	4.80	4.33	6.81
27NRSPPRCTS212PE	2 ½"	1	2"	A	2½"=> 75 mm	5.28	6.04	13.54	4.80	4.33	6.81
27NRSPPRCTS3PE	3"	1	3"	B	3"=> 90 mm	13.35	9.37	15.67	7.80	6.93	10.98
27NRSPPRCTS4PE	3 ½"	1	3"	B	3½"=> 110 mm	13.35	9.37	15.67	7.80	6.93	10.98

1.5 VALVES ACCESSORIES



TIGHTENING WRENCH FOR BALL VALVES

Material: Plastic
Range: 1" - 2" - 3"

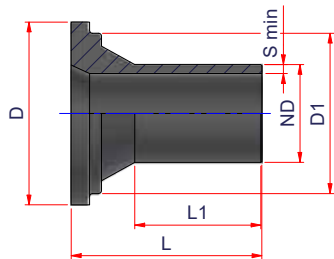


Code	Body Type	Weight lb/p.	Volume ft³/p.	A	B	C	D
00CHGH32	1"	0.141	0.0172	7.83	3.46	1.65	1.10
00CHGH63	2"	0.441	0.0545	10.62	5.83	2.97	1.52
00CHGH90	3"	1.312	0.1826	14.40	8.98	4.50	2.44



PE WELDING COLLAR SPIGOT ENDS

Material: PE
Range: ¾" ÷ 4"

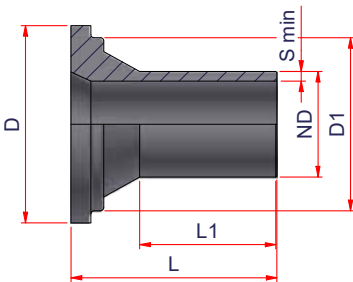


Code	Size	Body Type	Carton Qty	Weight lb/p.	Volume ft³/p.	ND (IPS)	S min	D1	D	L1	L
27NAPES34	¾" => 25 mm	1"	10	0.081	0.0085	¾" => 1.05 in	0.09	1.69	2.17	1.65	3.11
27NAPES1	1" => 32 mm	1"	10	0.081	0.0081	1" => 1.32 in	0.11	1.69	2.17	1.73	2.99
27NAPES114	1¼" => 40 mm	1"	10	0.117	0.0104	1¼" => 1.66 in	0.14	1.69	2.17	2.48	3.82
27NAPES112	1½" => 50 mm	2"	6	0.304	0.0301	1½" => 1.90 in	0.18	3.23	3.68	2.56	3.84
27NAPES2	2" => 63 mm	2"	6	0.370	0.0355	2" => 2.38 in	0.23	3.23	3.68	2.95	4.53
27NAPES212	2½" => 75 mm	2"	6	0.489	0.0373	2½" => 2.88 in	0.27	3.23	3.68	3.27	4.76
27NAPES3	3" => 90 mm	3"	1	1.058	0.099	3" => 3.50 in	0.32	4.35	6.02	3.27	4.72
27NAPES4	3½" => 110 mm	3"	1	1.422	0.1049	4" => 4.50 in	0.39	4.33	6.02	4.33	5.00



PP-RCT WELDING COLLAR SPIGOT ENDS

Material: PP-RCT
Range: ¾" ÷ 3½"

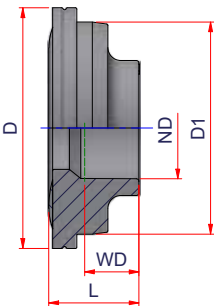


Code	Size	Body Type	Carton Qty	Weight lb/p.	Volume ft³/p.	ND	S min	D1	D	L1	L
27NAPPS25	¾" => 25 mm	1"	10	0.072	0.0085	¾" => 25 mm	0.09	1.69	2.17	1.65	3.11
27NAPPS32	1" => 32 mm	1"	10	0.106	0.0081	1" => 32 mm	0.11	1.69	2.17	1.73	2.99
27NAPPS40	1¼" => 40 mm	1"	10	0.141	0.0104	1¼" => 40 mm	0.14	1.69	2.17	2.48	3.82
27NAPPS50	1½" => 50 mm	2"	6	0.284	0.0301	1½" => 50 mm	0.18	3.23	3.68	2.56	3.84
27NAPPS63	2" => 63 mm	2"	6	0.397	0.0355	2" => 63 mm	0.23	3.23	3.68	2.95	4.53
27NAPPS75	2½" => 75 mm	2"	6	0.491	0.0373	2½" => 75 mm	0.27	3.23	3.68	3.27	4.76
27NAPPS90	3" => 90 mm	3"	1	1.007	0.099	3" => 90 mm	0.32	4.35	6.02	3.27	4.72
27NAPPS110	3½" => 110 mm	3"	1	1.177	0.1049	3½" => 110 mm	0.39	4.33	6.02	4.33	5.00



PP-RCT WELDING COLLAR SOCKET FUSION END

Material: PP-RCT
Range: ½" ÷ 3"

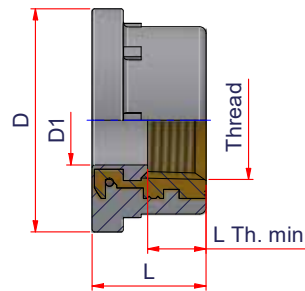


Code	Size	Body Type	Carton Qty	Weight lb/p.	Volume ft³/p.	ND	D1	D	WD	L
27NAPP20	½" => 20 mm	1"	10	0.039	0.0021	½" => 20 mm	1.69	1.97	9/16	0.94
27NAPP25	¾" => 25 mm	1"	10	0.041	0.0022	¾" => 25 mm	1.69	1.97	5/8	0.97
27NAPP32	1" => 32 mm	1"	10	0.043	0.0022	1" => 32 mm	1.69	1.97	11/16	1.00
27NAPP40	1¼" => 40 mm	2"	6	0.246	0.0106	1¼" => 40 mm	3.23	3.66	13/16	1.37
27NAPP50	1½" => 50 mm	2"	6	0.236	0.0119	1½" => 50 mm	3.23	3.66	15/16	1.53
27NAPP63	2" => 63 mm	2"	6	0.230	0.0129	2" => 63 mm	3.23	3.66	1 1/16	1.66
27NAPP75	2½" => 75 mm	2"	1	0.659	0.0354	2½" => 75 mm	4.37	6.02	1 3/16	1.69
27NAPP90	3" => 90 mm	3"	1	0.588	0.0388	3" => 90 mm	4.37	6.02	1 5/16	1.85



**PP-RCT / BRASS FEMALE ADAPTER
NPT THREADED**

Material: PP-RCT - Brass
Range: ½" ÷ 1"

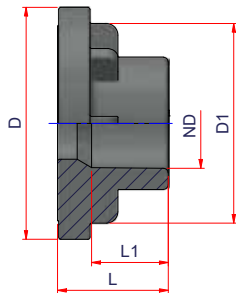


Code	Size	Body Type	Carton Qty	Weight lb/p.	Volume ft³/p.	D1	D	Thread	L Th. min	L
27NAPPF12NPT	½" => 20 mm	1"	1	0.148	0.0022	0.58	1.97	½" NPT	0.53	0.96
27NAPPF34NPT	¾" => 25 mm	1"	1	0.218	0.0023	0.79	1.97	¾" NPT	0.55	1.01
27NAPPF1NPT	1" => 32 mm	2"	1	0.531	0.0106	0.94	3.66	1" NPT	0.66	1.37



**WELDING COLLAR
PVC SOLVENT CEMENT END**

Material: PVC
Range: ½" ÷ 4"

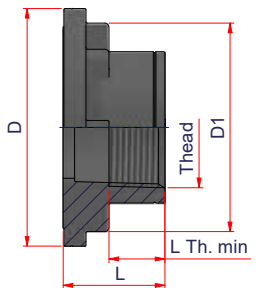


Code	Size	Body Type	Carton Qty	Weight lb/p.	Volume ft³/p.	ND(IPS)	D1	D	L1	L
27NAPVC12	½" => 20 mm	1"	10	0.055	0.0021	1/2" => 0.85 in	1.69	1.97	0.65	0.94
27NAPVC34	¾" => 25 mm	1"	10	0.620	0.0026	3/4" => 1.06 in	1.69	1.97	0.73	1.16
27NAPVC1	1" => 32 mm	1"	10	0.070	0.0029	1" => 1.33 in	1.69	1.97	0.81	1.28
27NAPVC114	1¼" => 40 mm	2"	6	0.253	0.0106	1" 1/4 => 1.67 in	3.23	3.66	0.89	1.37
27NAPVC112	1½" => 50 mm	2"	6	0.258	0.0119	1" 1/2 => 1.91 in	3.23	3.66	1.00	1.53
27NAPVC2	2" => 63 mm	2"	6	0.282	0.0129	2" => 2.39 in	3.23	3.66	1.14	1.66
27NAPVC212	2½" => 75 mm	3"	1	0.647	0.0354	2½" => 3.50 in	4.37	6.02	1.3	1.69
27NAPVC3	3" => 90 mm	3"	1	0.714	0.0354	3" => 4.50 in	4.37	6.02	1.3	1.69



**WELDING COLLAR
PVC SOLVENT CEMENT JOINT
WITH NPT THREAD**

Material: PVC
Range: ½" ÷ 3"



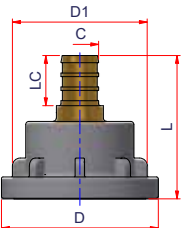
Code	Size	Body Type	Carton Qty	Weight lb/p.	Volume ft³/p.	ND(IPS)	D1	D	L Th. min	L
27NAPVCF12NPT	½" => 20 mm	1"	10	0.064	0.0021	1/2" => 0.85 in	1.69	1.97	0.65	0.94
27NAPVCF34NPT	¾" => 25 mm	1"	10	0.066	0.0026	3/4" => 1.06 in	1.69	1.97	0.73	1.16
27NAPVCF1NPT	1" => 32 mm	1"	10	0.090	0.0029	1" => 1.33 in	1.69	1.97	0.81	1.28
27NAPVCF114NPT	1¼" => 40 mm	2"	6	0.282	0.0106	1" 1/4 => 1.67 in	3.23	3.66	0.89	1.37
27NAPVCF112NPT	1½" => 50 mm	2"	6	0.293	0.0119	1" 1/2 => 1.91 in	3.23	3.66	1.00	1.53
27NAPVCF2NPT	2" => 63 mm	2"	6	0.335	0.0129	2" => 2.39 in	3.23	3.66	1.14	1.66
27NAPVCF212NPT	2½" => 75 mm	3"	1	0.661	0.0354	2½" => 3.50 in	4.37	6.02	1.30	1.69
27NAPVCF3NPT	3" => 90 mm	3"	1	0.65	0.0354	3" => 4.50 in	4.37	6.02	1.30	1.69

(A)

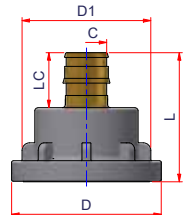


CRIMP RING ADAPTER

Material: PA
Range: ½" ÷ 1"



(B)

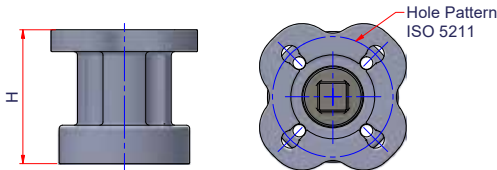


Code	Type	Size	Notes	Carton Qty	Weight lb/p.	Volume ft³/p.	D	D1	L	C	LC
27NAPRCR12	A	½"	ASTM F 1807	10	0.209	0.0040	1.97	1.69	1.79	½"	0.63
27NAPRCR34	A	¾"	ASTM F 1807	10	0.306	0.0042	1.97	1.71	1.87	¾"	0.65
27NAPRCR1	A	1"	ASTM F 1807	10	0.752	0.0189	3.66	3.23	2.44	1"	0.83
27NAPR12	B	½"	ASTM F 1960	10	0.209	0.0038	1.97	1.69	1.69	½"	0.72
27NAPR34	B	¾"	ASTM F 1960	10	0.273	0.0044	1.97	1.71	1.96	¾"	0.96
27NAPR1	B	1"	ASTM F 1960	10	0.608	0.0199	3.66	3.23	2.57	1"	1.20



FIXING BRACKET FOR ACTUATORS

Material: PA
Range: 1" - 2"
In accordance to ISO 5211

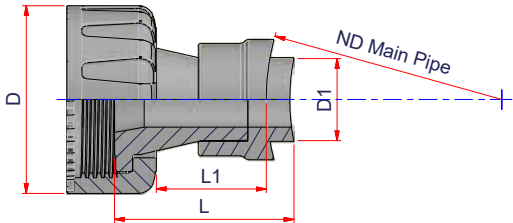


Code	Body Type	Carton Qty	Weight lb/p.	Volume ft³/p.	Hole Pattern	H
27NFBAF03	1"	10	-	-	F03	1.57
27NFBAF05	2"	10	-	-	F05	2.19



INSTABRANCH™ WELDING SOCKLET ADAPTER FOR PP-RCT VALVE

Material: PP-RCT
Range: 2" ÷ 24"

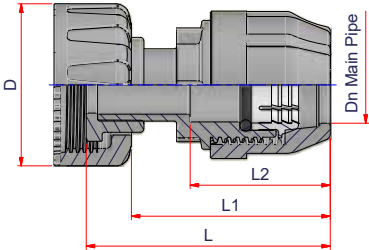


Code	Body Type	ND Main Pipe	Carton Qty	Weight lb/p.	Volume ft³/p.	D1	D	L1	L
27NARS32GS6375	1"	2" => 63 mm - 2 ½" => 75 mm	1	-	-	1.26	2.82	1.65	2.83
27NARS32GS90110125	1"	3" => 90 mm - 3 ½" => 110 mm 4" => 125 mm	1	-	-	1.26	2.82	1.65	2.74
27NARS32GS160200	1"	6" => 160 mm - 8" => 200 mm	1	-	-	1.26	2.82	1.65	2.70
27NARS32GS250315	1"	10" => 250 mm - 12" => 315 mm	1	-	-	1.26	2.82	1.65	2.68
27NARS32GS355630	1"	14" ÷ 24" => 355-630 mm	1	-	-	1.26	2.82	1.65	2.68
27NARS63GS110	2"	3 ½" => 110 mm	1	-	-	2.48	4.80	2.76	4.61
27NARS63GS125	2"	4" => 125 mm	1	-	-	2.48	4.80	2.76	4.51
27NARS63GS160	2"	6" => 160 mm	1	-	-	2.48	4.80	2.76	4.37
27NARS63GS200	2"	8" => 200 mm	1	-	-	2.48	4.80	2.76	4.31
27NARS63GS250	2"	10" => 250 mm	1	-	-	2.48	4.80	2.76	4.25
27NARS63GS315	2"	12" => 315 mm	1	-	-	2.48	4.80	2.76	4.21
27NARS63GS355450	2"	14" ÷ 18" => 355÷450 mm	1	-	-	2.48	4.80	2.76	4.17
27NARS63GS500630	2"	20" ÷ 24" => 500÷630 mm	1	-	-	2.48	4.80	2.76	4.17



COMPRESSION FITTING ADAPTER FOR PP-RCT VALVE

Material: PP-RCT
Range: ½" ÷ 2"

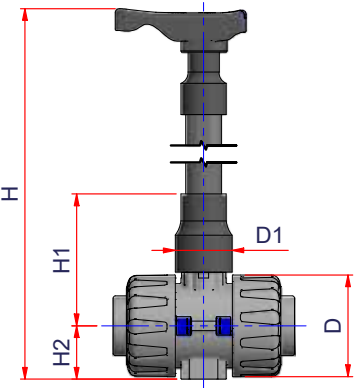


Code	Body Type	ND Main Pipe	Weight lb/p.	Volume ft³/p.	D	L	L1	L2
27NARS32K20	1"	½" => 20 mm	-	-	2.82	3.74	2.92	2.07
27NARS32K25	1"	¾" => 25 mm	-	-	2.82	3.78	2.99	2.15
27NARS32K32	1"	1" => 32 mm	-	-	2.82	4.25	3.46	2.46
27NARS63K40	2"	1 ¼" => 40 mm	-	-	4.80	5.98	4.88	3.15
27NARS63K50	2"	1 ½" => 50 mm	-	-	4.80	6.26	5.16	3.54
27NARS63K63	2"	2" => 63 mm	-	-	4.80	7.15	5.06	4.33



STEM EXTENSION FOR BALL VALVE LONG VERSION

Material: PVC
Notes: Article composed by nr.2 extensions
+ nr. 1 PVC Pipe (length 19.69in)



Code	Body Type	D	H1	H2	H min	H max.	D1	Note
27NRSEXL32	1"	2.82	3.66	1.48	8.07	26.26	1.57	for item: 27NRSPPRCT20, 27NRSPPRCT25, 27NRSPPRCT32 27NRSPPRCTS25, 27NRSPPRCTS32, 27NRSPPRCTS40
27NRSEXL63	2"	4.80	5.26	2.48	11.30	29.49	2.48	for item: 27NRSPPRCT40, 27NRSPPRCT50, 27NRSPPRCT63 27NRSPPRCTS50, 27NRSPPRCTS63, 27NRSPPRCTS75

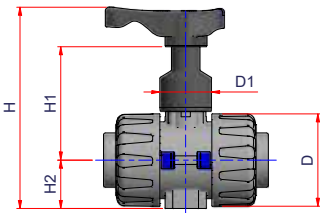
1.5 VALVES ACCESSORIES cont.

(A)

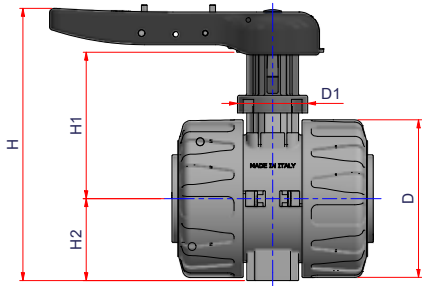


STEM EXTENSION FOR BALL VALVE
SHORT VERSION

Material: PVC

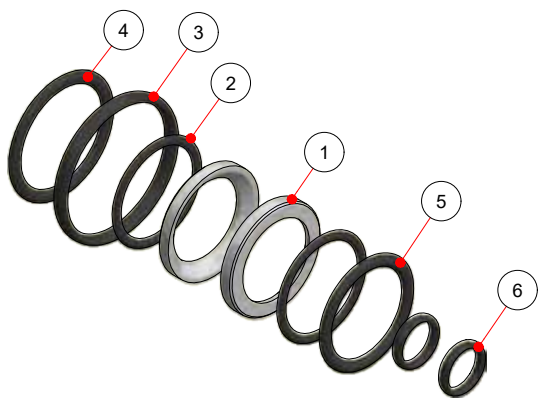


(B)



Code	Type	Body Type	Carton Qty	D	D1	H1	H2	H	Note
27NRSEXS32	A	1"	1	2.80	1.57	3.46	1.48	6.15	for item: 27NRSPPRCT20, 27NRSPPRCT25, 27NRSPPRCT32 27NRSPPRCTS25, 27NRSPPRCTS32, 27NRSPPRCTS40
27NRSEXS63	A	2"	1	4.80	2.48	5.28	2.48	9.65	for item: 27NRSPPRCT40, 27NRSPPRCT50, 27NRSPPRCT63 27NRSPPRCTS50, 27NRSPPRCTS63, 27NRSPPRCTS75
27NRSEXS90	B	2"	1	7.80	3.46	7.56	4.05	13.46	for item: 27NRSPPRCT75, 27NRSPPRCT90, 27NRSPPRCT110, 27NRSPPRCT125, 27NRSPPRCTS75, 27NRSPPRCTS90, 27NRSPPRCTS110

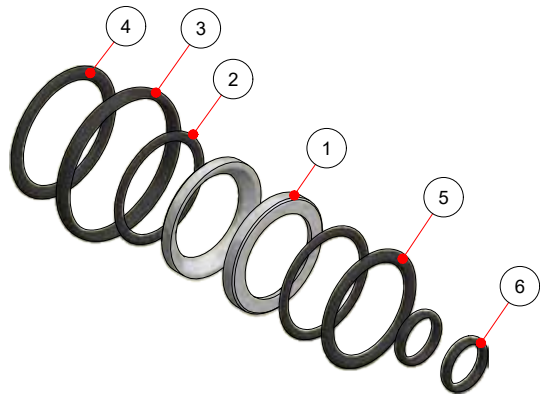
1.6 SPARE PARTS



REPLACEMENT VITON GASKET KIT

DESCRIPTION	
1	Teflon ball seat
2	Rod seal o-ring
3	Teflon seat o-ring
4	Radial seal o-ring
5	Socket seal o-ring
6	O-ring stem seal

Code	Size	Body Type	Carton Qty
00RSPPRCKIT32V	½" - ¾" - 1"	1"	1 KIT
00RSPPRCKIT63V	1¼" - 1½" - 2"	2"	1 KIT
00RSPPRCKIT90V	3" - 3 ½"	3"	1 KIT



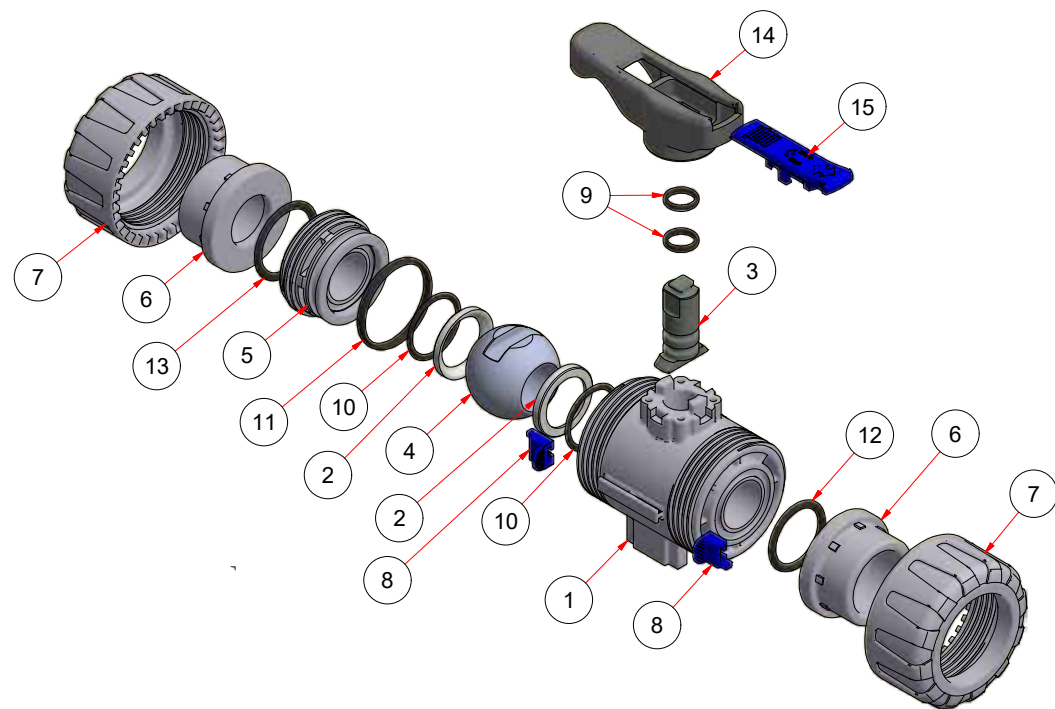
REPLACEMENT EPDM GASKET KIT

DESCRIPTION	
1	Teflon ball seat
2	Rod seal o-ring
3	Teflon seat o-ring
4	Radial seal o-ring
5	Socket seal o-ring
6	O-ring stem seal

Code	Size	Body Type	Carton Qty
00RSPPRCKIT32	½" - ¾" - 1"	1"	1 KIT
00RSPPRCKIT63	1¼" - 1½" - 2"	2"	1 KIT
00RSPPRCKIT90	3" - 3 ½"	3"	1 KIT

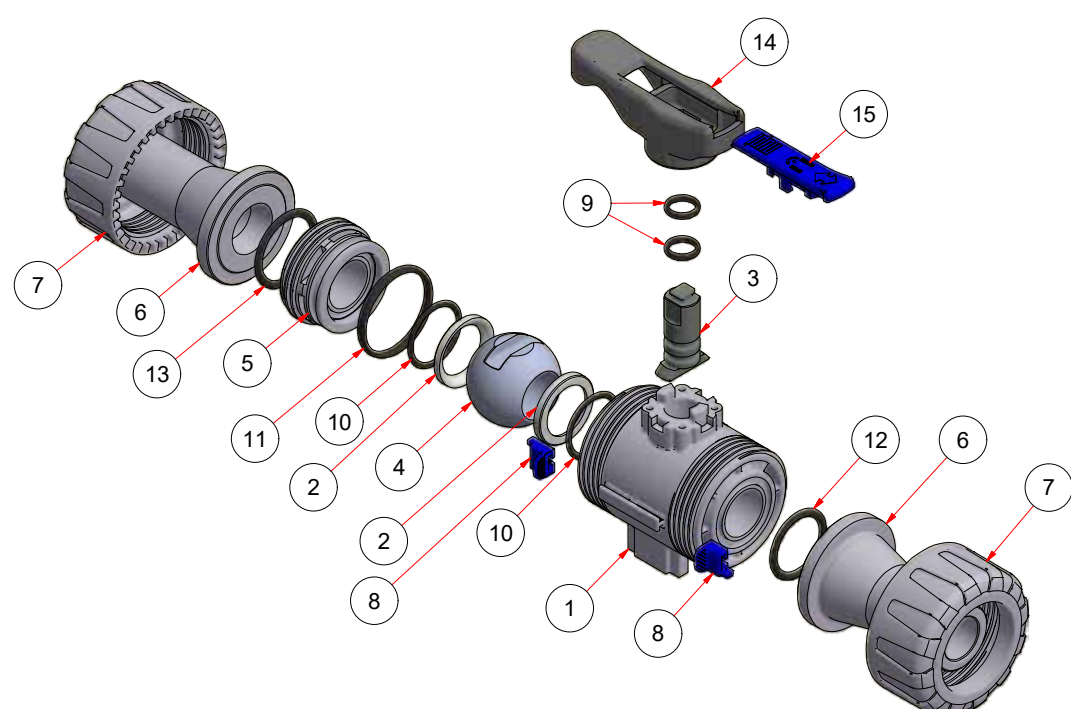
1.7 TRUE UNION BALL VALVE COMPONENTS

SOCKET FUSION OR PVC SOLVENT CEMENT JOINT EXAMPLE



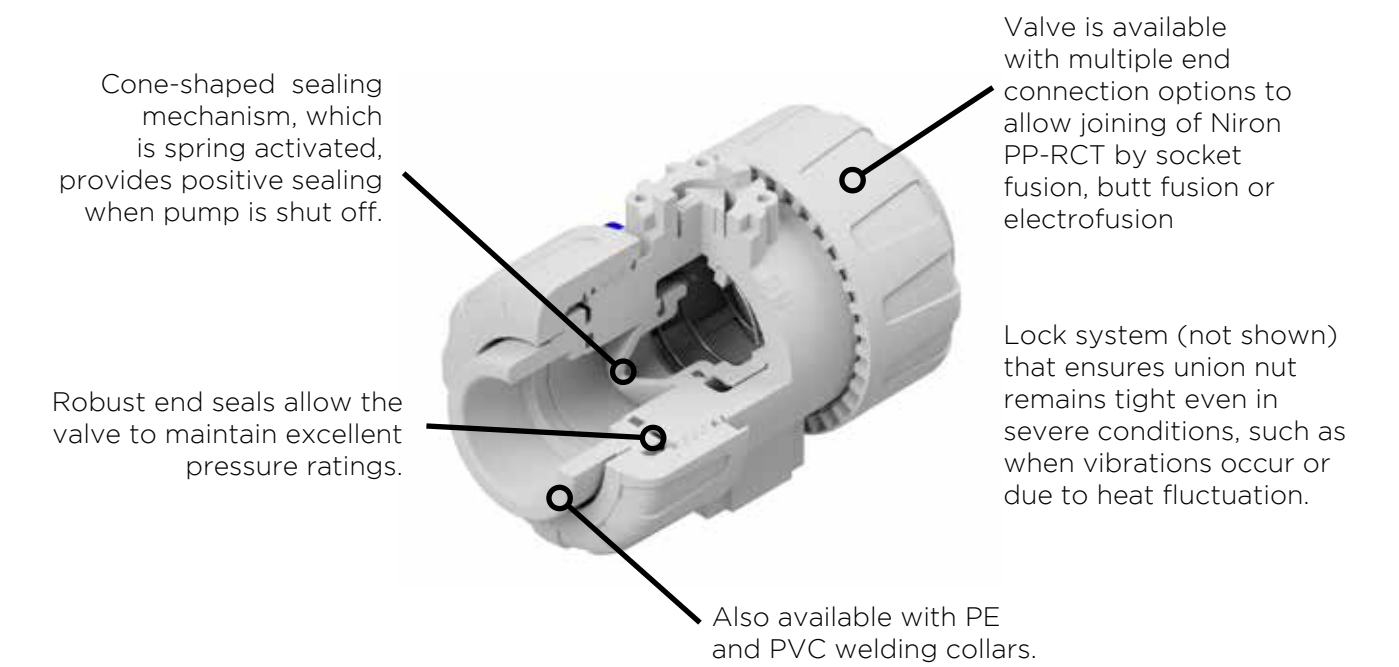
DESCRIPTION	MATERIAL	QTY
① Valve body	PP-RCT	1
② Teflon ball seat	PTFE F391	2
③ Stem	50% PP-RCT+50% PP-H FV 30%	1
④ Ball	25% PP-RCT+75% PP-H TALCO 20%	1
⑤ Internal screw nut	PP-RCT	1
⑥ Socket fusion end connector	PP-RCT or PVC	2
⑦ Union nut	PP-RCT	2
⑧ Locking mechanism	POM-C	2
⑨ Stem seal o-ring	EPDM 70sh Perox	2
⑩ Teflon seat o-ring	EPDM 70sh Perox	2
⑪ Radial seal o-ring	EPDM 70sh Perox	1
⑫ Face seal o-ring	EPDM 70sh Perox	1
⑬ Seal carrier face seal o-ring	EPDM 70sh Perox	1
⑭ Handle	PP-RCT	1
⑮ Handle Insert	POM-C blue or red	1

BUTT FUSION WELDING EXAMPLE



DESCRIPTION	MATERIAL	QTY
① Valve body	PP-RCT	1
② Teflon ball seat	PTFE F391	2
③ Command rod	50% PP-RCT+50% PP-H FV 30%	1
④ Ball	25% PP-RCT+75% PP-H TALCO 20%	1
⑤ Internal screw nut	PP-RCT	1
⑥ Stub end long spigot	PP-RCT or PE	2
⑦ Union nut	PP-RCT	2
⑧ Block cursor	POM-C	2
⑨ Rod seal o-ring	EPDM 70sh Perox	2
⑩ Teflon seat o-ring	EPDM 70sh Perox	2
⑪ Radial seal o-ring	EPDM 70sh Perox	1
⑫ Socket seal o-ring	EPDM 70sh Perox	1
⑬ O-ring seal (side internal screw nut)	EPDM 70sh Perox	1
⑭ Handle	PP-RCT	1
⑮ Handle Insert	POM-C blue or red	1

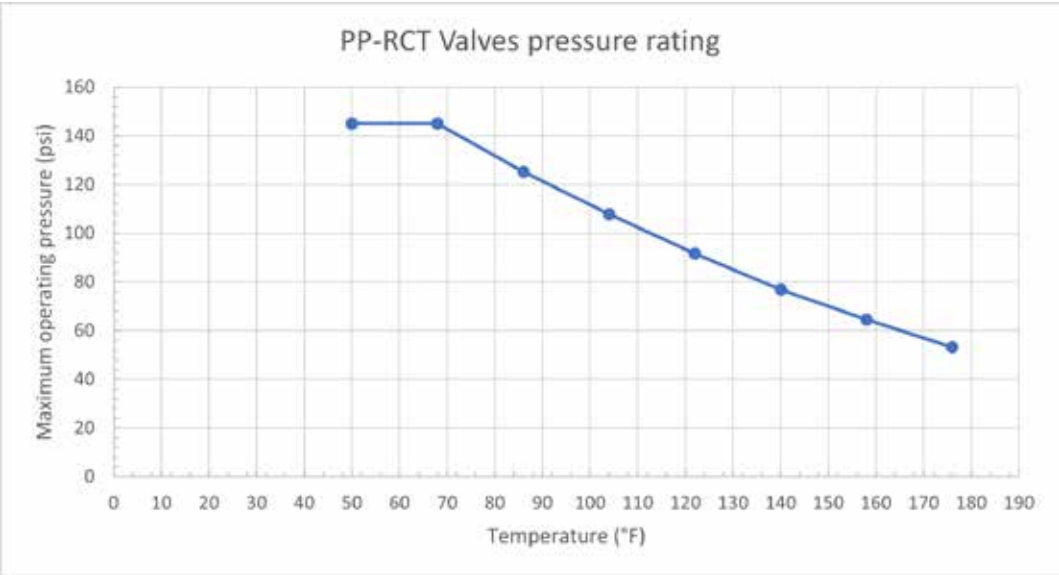
2. TRUE UNION CONE CHECK VALVE



2.1 TECHNICAL SPECIFICATIONS

CONSTRUCTION	Cone check valve with locking rings
VALVE MATERIAL	PP-RCT
SEAL & MISC MATERIAL	EPDM, O-rings and face seals 304 Stainless steel springs
SIZE RANGE	1/2" - 3/4" - 1" - 1 1/4" - 1 1/2" - 2" - 3" socket fusion 3/4" - 1" - 1 1/4" - 1 1/2" - 2" - 2 1/2" spigot end
NOMINAL PRESSURE	PN 10 with water at +68°F
TEMPERATURE RANGE	+32° F ÷ +176° F
HYGIENIC LAW AND SPECIFICATIONS	NSF 61 (Drinking Water System Components - Health Effects). D.M. 174: (Italy: Ministry of Health. Regulations concerning materials and objects that can be used in fixed systems for collection, treatment, adduction and distribution of water intended for human consumption).
COUPLING STANDARDS	Coupled with pipes according to EN ISO 15494 (Plastics Piping Systems For Industrial Applications), EN ISO 15874 (Plastics Piping Systems For Hot And Cold Water Installations), ASTM F2389 (Standard Specifications For Pressure-Rated Polypropylene (Pp) Piping Systems)
CONTROL OPTIONS	N/A

2.2 PRESSURE VARIATION ACCORDING TO TEMPERATURE

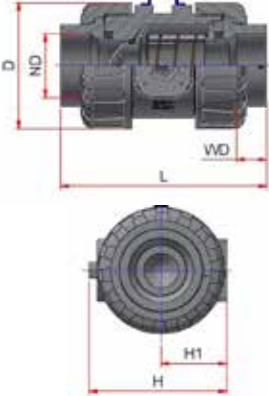


2.3 PRODUCT RANGE



TRUE UNION PP-RCT CONE CHECK VALVE WITH SOCKET FUSION ENDS

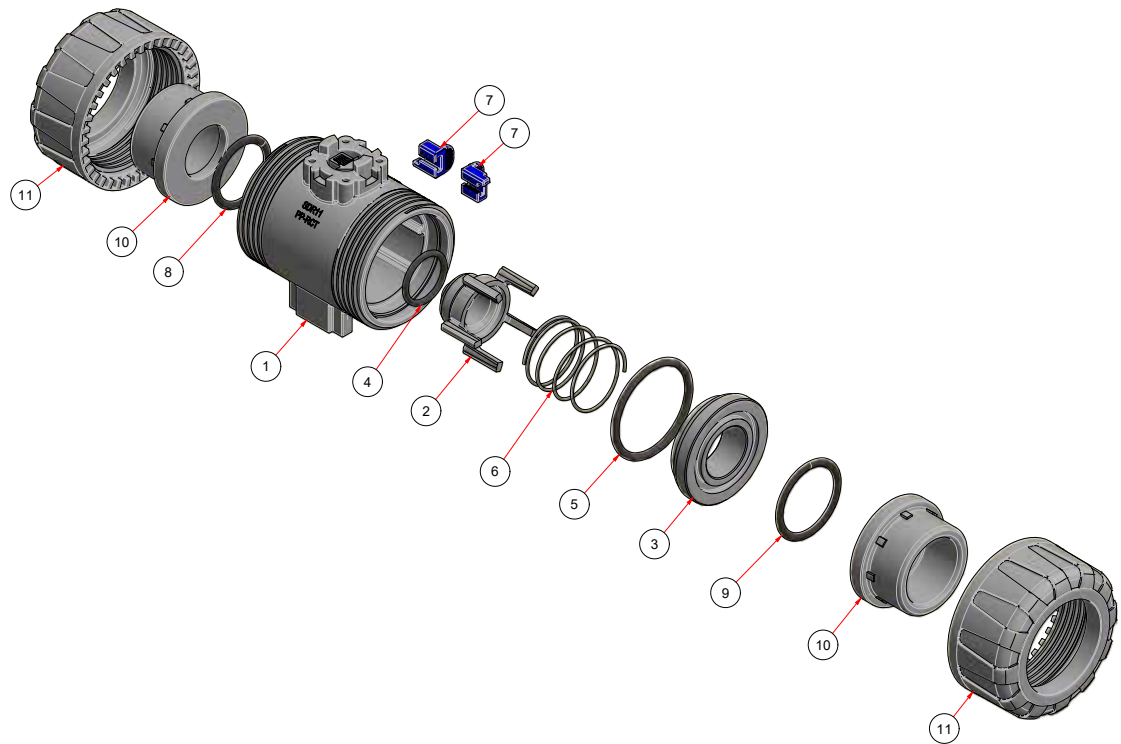
Material: PP-RCT
Range: 1/2" ÷ 2"
Note: Available in blue or red version



Code	Size	Carton Qty	Body Type	ND	L	D	WD	H1	H
27NBCV20	1/2"	1	1"	1/2" => 20 mm	4.88	2.82	9/16	1.48	2.95
27NBCV25	3/4"	1	1"	3/4" => 25 mm	4.96	2.82	5/8	1.48	2.95
27NBCV32	1"	1	1"	1" => 32 mm	5.04	2.82	11/16	1.48	2.95
27NBCV40	1 1/4"	1	2"	1 1/4" => 40 mm	6.95	4.80	13/16	2.48	5.20
27NBCV50	1 1/2"	1	2"	1 1/2" => 50 mm	7.26	4.80	15/16	2.48	5.20
27NBCV63	2"	1	2"	2" => 63 mm	7.80	4.80	1 1/16	2.48	5.20
27NBCV75	3"	1	3"	2 1/2" => 75 mm	9.61	7.80	1 3/16	4.06	7.32
27NBCV90	3"	1	3"	3" => 90 mm	9.96	7.80	1 5/16	4.06	7.32

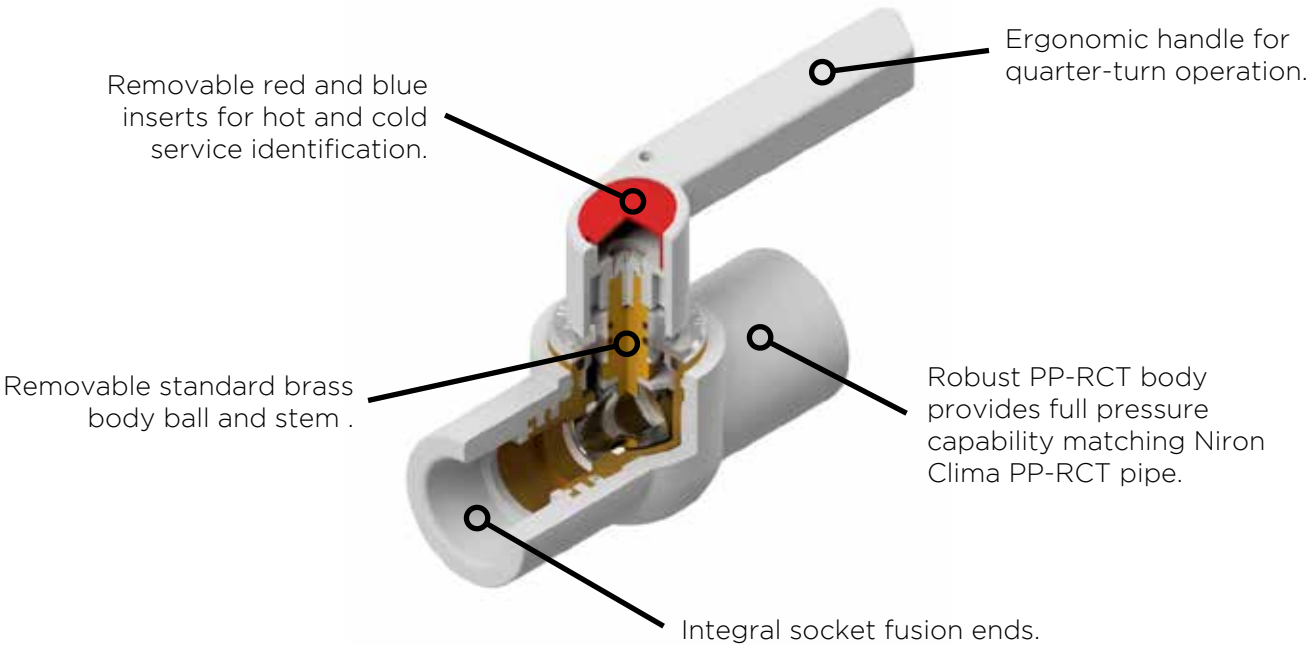
2.4 TRUE UNION CONE CHECK VALVE COMPONENTS

SOCKET FUSION EXAMPLE



	DESCRIPTION	MATERIAL	QTY
①	Valve body	PP-RCT	1
②	Cone check	PP-RCT	1
③	Seal carrier	PP-RCT	1
④	O-ring	EPDM	1
⑤	Face seal	EPDM	1
⑥	Spring	AISI 302	1
⑦	Locking mechanism	POM-C	2
⑧	Face seal	EPDM	1
⑨	Face seal	EPDM	1
⑩	Socket fusion end connector	PP-RCT	2
⑪	Union nut	PP-RCT	2

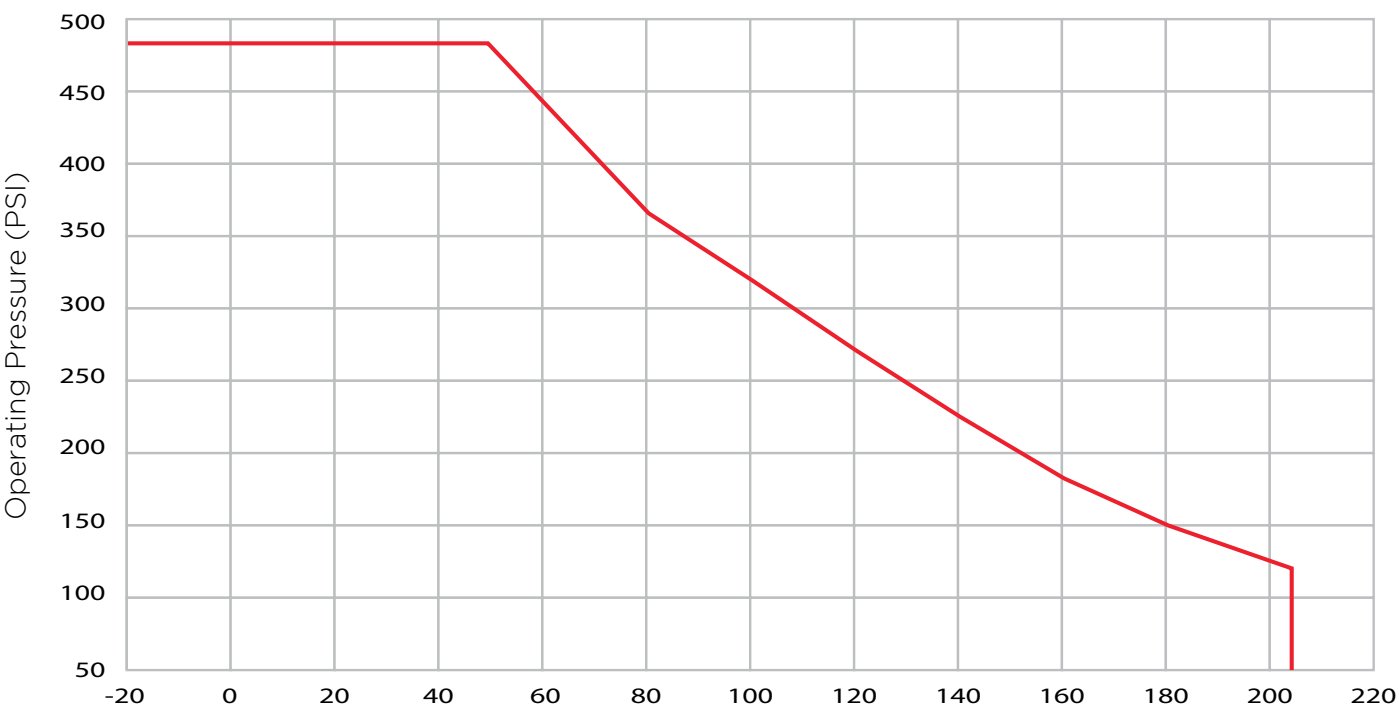
3. PP-RCT FULL BORE BALL VALVE WITH STANDARD BRASS SOCKET FUSION ENDS



3.1 TECHNICAL SPECIFICATIONS

CONSTRUCTION	Unitary PP-RCT body with removable brass top works
VALVE MATERIAL	Combination PP-RCT and standard brass
SEAL MATERIAL	EPDM, (standard size O-Ring) PTFE (ball seats)
SIZE RANGE	½" - ¾" - 1" socket fusion
NOMINAL PRESSURE	Matches Niron Clima PP-RCT pipe, SDR 7.3
TEMPERATURE RANGE	+32° F ÷ +203° F
HYGIENIC LAW AND SPECIFICATIONS	D.M. 174: (Italy: Ministry of Health. Regulations concerning materials and objects that can be used in fixed systems for collection, treatment, adduction and distribution of water intended for human consumption).
COUPLING STANDARDS	Coupled with pipes according to EN ISO 15494 (Plastics Piping Systems For Industrial Applications), EN ISO 15874 (Plastics Piping Systems For Hot And Cold Water Installations), ASTM F2389 (Standard Specifications For Pressure-Rated Polypropylene (Pp) Piping Systems)
CONTROL OPTIONS	N/A

3.2 PRESSURE VARIATION ACCORDING TO TEMPERATURE

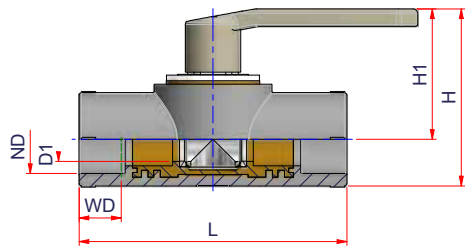


3.3 PRODUCT RANGE



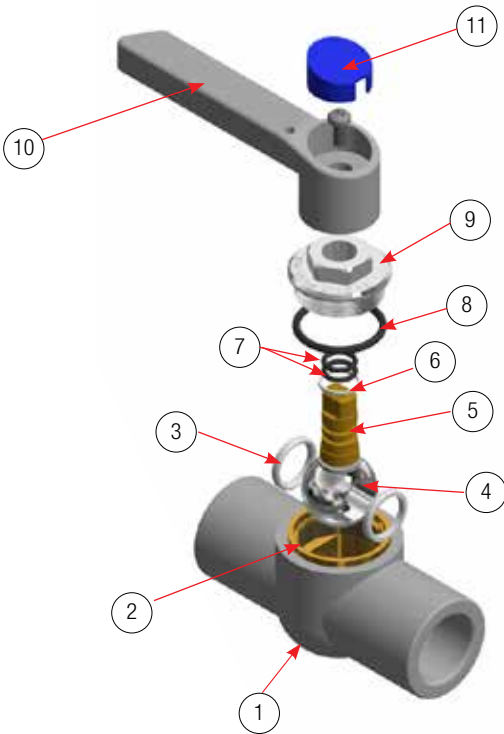
PP-RCT FULL BORE BALL VALVE WITH STANDARD BRASS
WITH SOCKET FUSION ENDS

Material: PP-RCT and Standard Brass
Range: ½" ÷ 1"



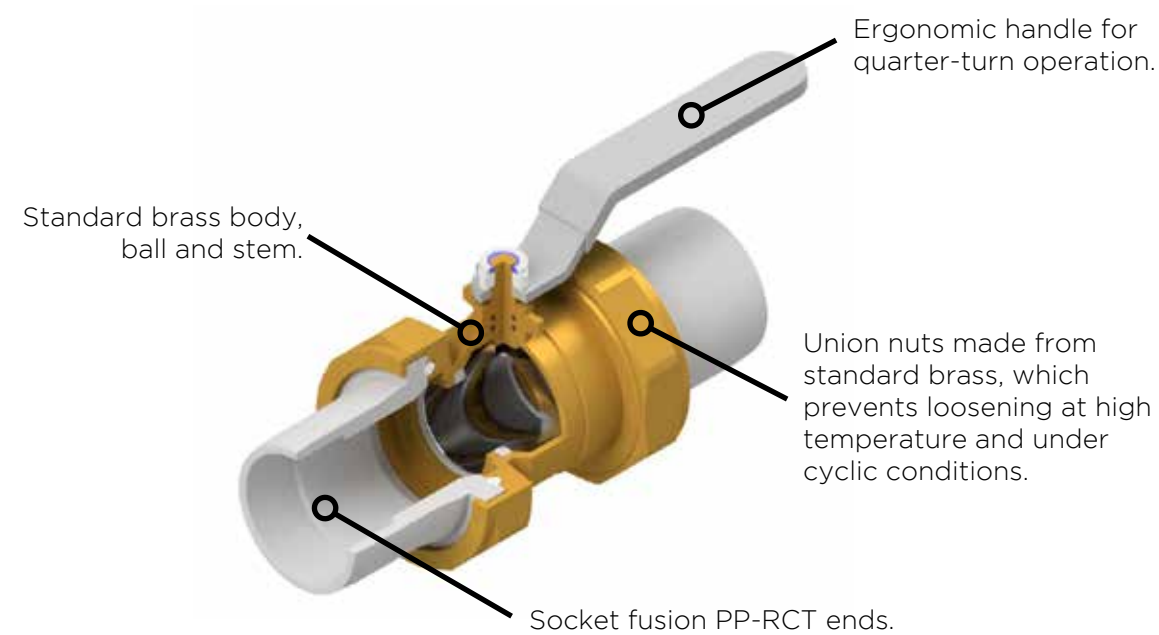
Code	Size	Carton Qty	Weight lb/p.	Volume ft³/p.	ND	D1	WD	L	H1	H
27NRSL20	½"	10	0.814	0.0381	1/2" => 20 mm	0.59	9/16	3.96	2.24	2.91
27NRSL25	¾"	10	0.814	0.0381	3/4" => 25 mm	0.59	5/8	3.96	2.24	2.91
27NRSL32	1"	10	1.111	0.0381	1" => 32 mm	0.79	11/16	4.76	2.36	3.23

3.4 PP-RCT FULL BORE BALL VALVE WITH STANDARD BRASS
SOCKET FUSION ENDS COMPONENTS



	DESCRIPTION	MATERIAL	QTY
①	Valve body	PP-RCT	1
②	Brass ball carrier	STANDARD BRASS CW 617N	1
③	Ball seats	PTFE	2
④	Ball	STANDARD BRASS CW 617N	1
⑤	Valve stem	STANDARD BRASS CW 617N	1
⑥	Stem seal	FLUOROELASTOMER	1
⑦	Stem o-ring seals	NBR	2
⑧	Stem face seal	NBR	1
⑨	Valve top works cap	STANDARD BRASS CW 617N	1
⑩	Handle	POWDER COATED STEEL	1
⑪	Service Indicator	PP	1

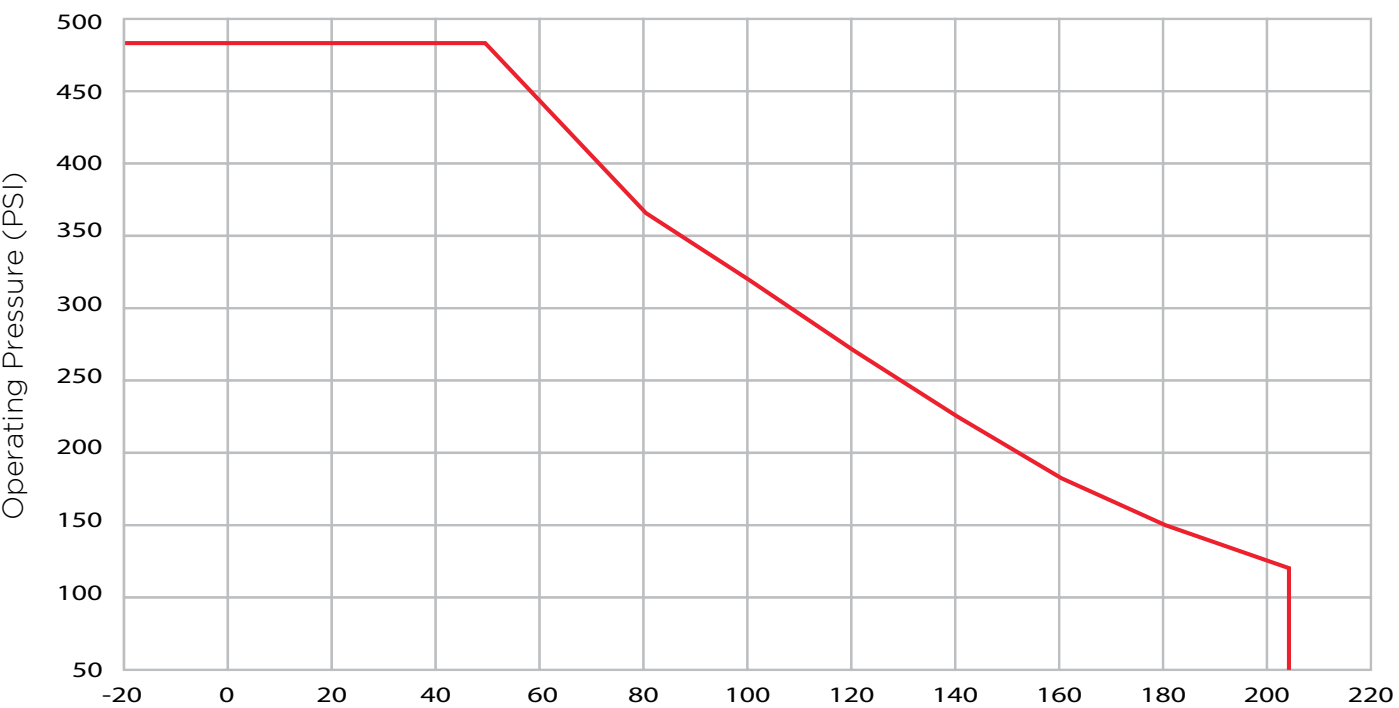
4. TRUE UNION STANDARD BRASS VALVE WITH PP-RCT SOCKET FUSION ENDS



4.1 TECHNICAL SPECIFICATIONS

CONSTRUCTION	True union standard brass body with PP-RCT socket fusion ends
VALVE MATERIAL	Combination PP-RCT and standard brass
SEAL MATERIAL	EPDM, (standard size O-Ring) PTFE (ball seats)
SIZE RANGE	1¼" - 1½" - 2" socket fusion
NOMINAL PRESSURE	Matches Niron Clima PP-RCT pipe, SDR 7.3
TEMPERATURE RANGE	+32° F ÷ +203° F
HYGIENIC LAW AND SPECIFICATIONS	D.M. 174: (Italy: Ministry of Health. Regulations concerning materials and objects that can be used in fixed systems for collection, treatment, adduction and distribution of water intended for human consumption).
COUPLING STANDARDS	Coupled with pipes according to EN ISO 15494 (Plastics Piping Systems For Industrial Applications), EN ISO 15874 (Plastics Piping Systems For Hot And Cold Water Installations), ASTM F2389 (Standard Specifications For Pressure-Rated Polypropylene (Pp) Piping Systems)
CONTROL OPTIONS	N/A

4.2 PRESSURE VARIATION ACCORDING TO TEMPERATURE

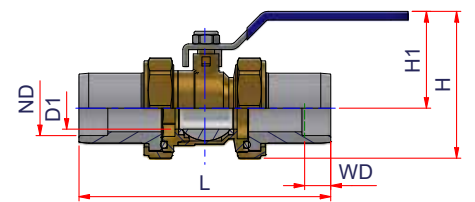


4.3 PRODUCT RANGE



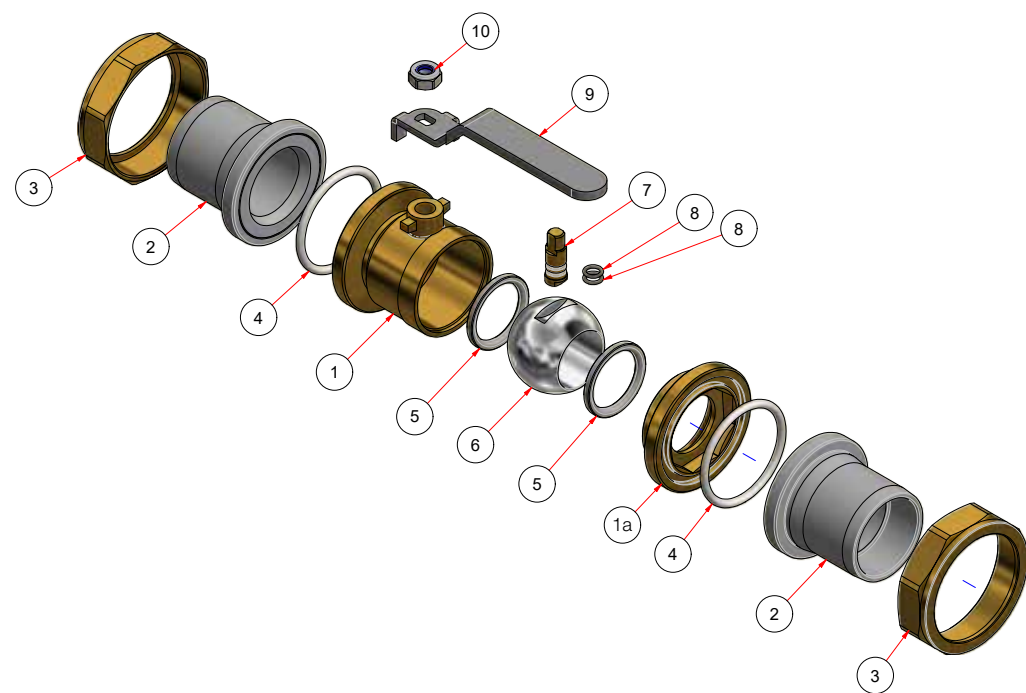
TRUE UNION STANDARD BRASS VALVE WITH PP-RCT SOCKET FUSION ENDS

Material: Standard Brass and PP-RCT
Range: ½" ÷ 1"



Code	Size	Carton Qty	Weight lb/p.	Volume ft³/p.	ND	D1	WD	L	H1	H
27NRSFN40	1¼"	6	2.37	0.0464	1¼" => 40 mm	1.18	13/16	7.02	2.70	4.09
27NRSFN50	1½"	4	3.95	0.0685	1½" => 50 mm	1.46	15/16	7.92	2.89	4.54
27NRSFN63	2"	2	6.17	0.1066	2" => 63 mm	1.85	11/16	9.05	3.27	5.22

4.4 TRUE UNION STANDARD BRASS VALVE WITH PP-RCT
SOCKET FUSION ENDS COMPONENTS



	DESCRIPTION	MATERIAL	QTY
①	Valve body	STANDARD BRASS (LEAD <2%)	1
①a	Seal carrier	STANDARD BRASS (LEAD <2%)	1
②	Socket fusion end connector	PP-RCT	1
③	Union nut	STANDARD BRASS (LEAD <2%)	2
④	Face seal o-ring	NBR	2
⑤	Valve seat	PTFE	2
⑥	Ball	STANDARD BRASS (LEAD <2%)	1
⑦	Valve stem	STANDARD BRASS (LEAD <2%)	1
⑧	Stem o-ring	NBR	2
⑨	Handle	GALVANIZED STEEL	1
⑩	Nut	GALVANIZED STEEL	1

5. INSTALLATION OF TRUE UNION PP-RCT VALVES

Before proceeding with installation please follow these instructions carefully:

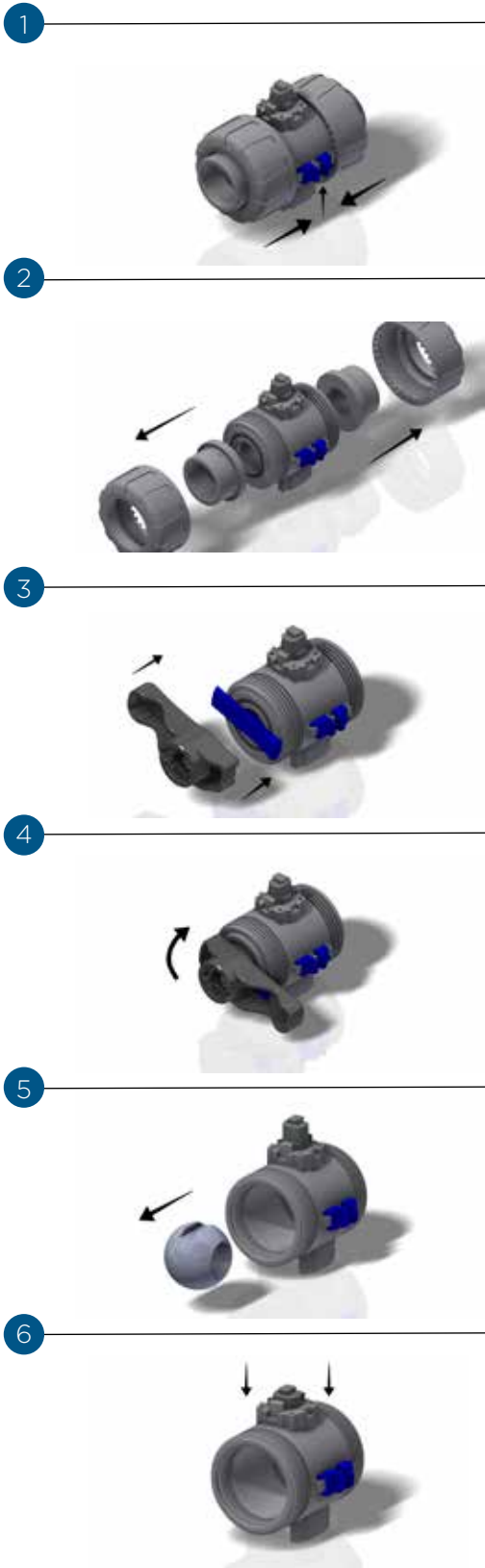
- 1) Check that the pipes to be connected to the valve are aligned in order to avoid mechanical stress on the threaded joints.
- 2) To release the outer rings, axially move the two block cursors and unlock the rings. Then uncrew it in the counter-clockwise direction.
- 3) Unscrew the outer rings and insert them on the pipe segments.
- 4) Weld the welding collars onto the pipe ends.
- 5) Position the body's valve between the welding collars and fully tighten the outer ring manually by rotating clockwise without using wrenches or other tools that could damage the outer ring surface.
- 6) Lock the outer rings with the block cursor.



6. DISMANTLING & REASSEMBLY OF TRUE UNION PP-RCT VALVES

Isolate the valve from the line (release the pressure and empty the pipeline).

- 1) Unlock the outer rings with the block cursors.
- 2) Fully unscrew the outer rings and remove the welding collars. Before dismantling, hold the valve in a vertical position and open it 45° to drain any liquid that might have remained inside.
- 3) After closing the valve, remove the handle insert and push it into the corresponding recesses on the internal screw nuts.
- 4) Then push the handle on the handle insert and unscrew clockwise.
- 5) Press the ball from the opposite side of the internal screw nuts and extract it.
- 5) Remove the O-rings from the PTFE ball seats by extracting them from their grooves.



*** For the reassembly, follow the previous steps in the opposite direction (7-1).**
Note: during assembly operations it is recommended to lubricate the rubber seals. Mineral oils are not recommended for this task as they react aggressively with EPDM rubber. This is not a requirement for the original installation of the valve. It is only necessary when reassembling the valve after dismantling the valve to perform maintenance.



Niron PP-RCT Valves are available for a wide range of commercial and industrial applications. The PP-RCT material has excellent resistance to a wide range of chemicals.



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