



INDICES



Keyword Index

(Page 1 of 2)

Keywords	Page	Keywords	Page
"Y" Strainer, Figure 760P	80 - 81	Dielectric Waterways, Figures 407GT	92
10-Year Limited Warranty	163	Dielectric Waterways, Figures 407T	92
11½° Elbows, Figures 211 & 311	44	Diffuser, Figure 725G Suction	82
22½° Elbows, Figures 212 & 312	43	Drilling Specifications Flange	144
45° Elbows, Figure 201 & 301	42	Eccentric Reducers, Figures 251 & 351	58 - 60
45° Elbows, Figure 201LR	42	Elbows, 11½° Figures 211 & 311	44
45° Laterals, Figure 314	61	Elbows, 22½° Figures 212 & 312	43
45° Reducing Laterals, Figure 325	62	Elbows, 45° Figure 201 & 301	42
45° Stainless Steel Elbows, Figure 401	100	Elbows, 45° Figure 201LR	42
90° Elbows, Figure 210	40	Elbows, 90° Figure 210	40
90° Long Radius Elbows, Figures 210LR & 310LR	41	Electrical Continuity	26
90° Stainless Steel Elbows, Figure 410	100	End Caps with ISO R7 Threaded Outlets	48 - 49
Adapter Washers, Flange	32	End Caps, Figure 460	102
Adapter, Flange Technical Data	33	End Caps, Figures 260 & 360	47
Adapters, Flange Figure 343 & 344	34 - 35	Expansion / Contraction	130
Adapters, Flange Figure 71	31	Expansion Joint, Figure ALG	89
Agency Listings and Approvals	11	Expansion Joint, Figure ANS	90
Air, Water & Chemical Gasket Recommendations	119 - 121	Expansion Joint, Figure RXAG	88
Angular Deflection	130	Figure Number Index	162
Angular Movement	136	First Seal	118
Approval Bodies	11	Fitting Friction Resistance Chart	39
ASME Standard Note	27	Fitting Specifications, Stainless Steel Systems	95
Associations	11	Fittings Specifications	39
Basic Materials & Methods	146	Flange Adapter	119
Bellows, Figure FSF Flanged Rubber	91	Flange Adapter Technical Data	33
Building Service Systems - Cooling	148	Flange Adapters Table of Contents	30
Building Service Systems - Heating	149	Flange Adapters, Figure 343 & 344	34 - 35
Butterfly Valves Model B303	75 - 77	Flange Adapters, Figure 443 & 444	99
Centre Punch	109	Flange Adapters, Figure 71	31
Check Valves, Model CV-1 Grooved End	78 - 79	Flange Drilling Specifications	144
Chemical, Water, & Air Gasket Recommendations	119 - 121	Flanged Rubber Bellows, Figure FSF	91
Circuit Balancing Valves Grooved Ends	84	Flexible Couplings, Figure 705	21
Circuit Balancing Valves Insulation Kits	86	Flexible Couplings, Heavy Duty Figure 707	22 - 23
Circuit Balancing Valves MC2 Measuring Computer	86	Flexible Joints	130, 134
Circuit Balancing Valves Threaded Ends	85	Flexible Reducing Couplings, Figure 716	24
Computer, Model MC2 Measuring	86	Flexible Retrofits and Repairs	8
Concentric Reducers, Figure 450	104	Friction Resistance Chart, Fitting	39
Concentric Reducers, Figures 250 & 350	55 - 57	Galvanised Finish, Electrical Continuity	26
Continuity, Electrical	26	Gasket Air, Water & Chemical Recommendations	119 - 121
Contraction / Expansion	130	Gasket Grade & Recommendations	118
Conversion Chart, Metric/Imperial	145	Gasket Lubricants	122
Cooling System Specifications	148	Gasket Seal	118
Coupling Installation Information	27	Gasket Styles	119
Coupling Specifications, Stainless Steel Systems	95	Gauges	110
Couplings, Flexible Figure 705	21	Gear Operators, Model B303 Butterfly Valves	75 - 77
Couplings, Flexible Heavy Duty Figure 707	22 - 23	General Code Groups	11
Couplings, Flexible Reducing Figure 716	24	Global Pipe Size Designations	143
Couplings, Rigid Figure 772	18 - 19	Global Presence / Local Service	9
Couplings, Rigid Figure 774	20	Government Agencies	11
Couplings, Transition Figure 7706T	25	Groove Ended Metering Station, Figure 70607	87
Cross, Figure 227	46	Groove Measurement Tapes	109
Cut Groove Standard Specification	113 - 114	Groove x Female Thread Nipple, Figure 305	63
Deflection and Misalignment	133	Groove x Male Thread Nipple, Figure 304	63
Dependability	10	Grooved Couplings Table of Contents	16
Design	130	Grooved End Butterfly Valves Model B303	75 - 77
Design to Build, Your Partner from	152	Grooved End Check Valves, Model CV-1	78 - 79

Keyword Index

(Page 2 of 2)

Keywords	Page	Keywords	Page
Grooved Fittings Table of Contents.	38	Rigid Couplings, Figure 774	20
Heating System Specifications.	149	Rigid Joints.	130, 134
Heavy Duty Flexible Couplings, Figure 707	22 - 23	Rilsan Coated Flexible Coupling, Figure 705R	98
Hole Cutting Tool Spare Parts	108	Roll Groove Standard Specification	111 - 112
How to Build Part Numbers.	13	Rotational Movement	135
Imperial/Metric Conversion Chart	145	Rubber Bellows, Figure FSF Flanged	91
Installation Information, Coupling	27	Second Seal	118
Insulation Kits, Model CB800	86	Specification, Circuit Balancing Valves	83
ISO 9001:2008 Certified	12	Specification, Cut Groove	113 - 114
ISO R7 Threaded Outlets, End Caps	49	Specification, Fittings	39
Joint, Figure ALG Expansion	89	Specification, Flange Drilling	144
Joint, Figure ANS Expansion	90	Specification, Roll Groove	111 - 112
Joint, Figure RXAG Expansion	88	Stainless Steel Elbows, 45° Figure 401	100
Laboratories	11	Stainless Steel Elbows, 90° Figure 410	100
Laterals, 45° Figure 314	61	Stainless Steel Flexible Couplings, Figure 405.	97
Lever-Lock Operators, Model B303 Butterfly Valves	75 - 77	Stainless Steel Pipe Design Data Pressure Rating	142
Linear Movement.	135	Stainless Steel Rigid Couplings, Figure 472	96
Linear Movement (Flexible Couplings)	130	Stainless Steel Systems Coupling Specifications.	95
Long Radius Elbows, 90° Figures 210LR & 310LR	41	Stainless Steel Systems Fitting Specifications	95
Measuring Computer, Circuit Balancing Valves MC2	86	Stainless Steel Systems Table of Contents	94
Mechanical Tees – Grooved, Figure 730	70 - 72	Standard	117
Mechanical Tees – Threaded, Figure 730.	67 - 69	Strainer, Figure 760P "Y"	80 - 81
Metering Station, Figure 70607 Groove Ended	87	Suction Diffuser, Figure 725G	82
Metric/Imperial Conversion Chart	145	Superior Quality	10
Misalignment and Deflection.	133	Table of Contents, Flange Adapters	30
Movement	135 - 136	Table of Contents, Grooved Couplings	16
Noise And Vibration	10	Table of Contents, Grooved Fittings	38
Outlet Fittings	117, 125	Table of Contents, Outlet Fittings	66
Outlet Fittings Table of Contents.	66	Table of Contents, Stainless Steel Systems.	94
Painted Finish, Electrical Continuity	26	Technical Data, Flange Adapter.	33
Part Number Index	158 - 161	Tees, Figure 419	101
Part Numbers, How to Build	13	Tees, Figures 219 & 319	45
Pipe Data.	138	Thermal Contraction	132
Pipe Design Data Pressure Rating, Stainless Steel	142	Thermal Expansion	132
Pipe Preparation Tools	107	Thermal Movement	131 - 132
Pipe Size Designations, Global	143	Transition Couplings, Figure 7706T	25
Pipe Stands	107	Tri-Seal Freezer Gasket	117
Pipe Support.	134 - 136	Typical General Specification	145
Plumbing Specifications	147	Typical Guide Specification	146
PN10/PN16, BS4504.	31	Typical Specifications, Building Service Systems - Cooling	148
Preparation Equipment Table of Contents	106	Typical Specifications, Building Service Systems - Heating.	149
Pressure Ratings (Bar) ISO Size Steel Pipe.	140 - 141	Typical Specifications, Building Service Systems - Plumbing	147
Pressure Ratings (psi) Light Wall Steel Pipe	139	Valves & Accessories Table of Contents	74
Product Features and Benefits	10	Valves, Model CV-1 Grooved End Check	78 - 79
Rating, Stainless Steel Pipe Design Data Pressure.	142	Versatility	10
Reducing Coupling	117, 126	Vertical Piping.	137
Reducing Couplings, Flexible Figure 716	24	Washers, Flange Adapter.	32
Reducing Laterals, 45° Figure 325	62	Water, Air, & Chemical Gasket Recommendations	119 - 121
Reducing Tees (Groove x Groove x Female BSP Thread)	54	Waterways, Figures 407GT & 407T Dielectric	92
Reducing Tees, Figure 421	103	Website	14
Reducing Tees, Figures 221	50 - 53	Why GRINNELL?	9
Reducing Tees, Figures 321	50 - 53	Why Grooved?	8
Replacement Gaskets for, Figure 705.	123 - 124	Working Pressure Ratings on ISO Size Steel Pipe.	140 - 141
Replacement Gaskets for, Figure 730.	127	Working Pressure Ratings on Light Wall Steel Pipe	139
Resistance Chart, Fitting Friction	39		
Rigid Couplings, Figure 772	18 - 19		

Part Number Index

(Page 1 of 4)

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
10BUNA	124	201M00273*	42	219M00114*	45	250M01162*	56	26VITON.....	124
10EPDM	123	201M00324*	42	219M00139*	45	250M01210*	55	2BUNA730	127
10EPDM-DVGW	123	20BUNA	124	219M00141*	45	250M01510*	55	2EPDM730	127
10EPDM-PW.....	123	20BUNA71	125	219M00165*	45	250M02010*	55	301T00355*	42
10SILICONE.....	124	20EPDM	123	219M00168*	45	250M02012*	55	301T00406*	42
10VITON.....	124	20EPDM-DVGW	123	219M00219*	45	250M02015*	55	301T00457*	42
11BUNA	124	20EPDM-PW.....	123	219M00273*	45	250M02520*	55	301T00508*	42
11BUNA71	125	20EPDM-TRI.....	123	219M00324*	45	250M02612*	55	301T00610*	42
11EPDM	123	20EPDM71	125	219M00355*	45	250M02615*	55	304H000342.....	63
11EPDM-DVGW	123	20SILICONE.....	124	219M00406*	45	250M02620*	55	304H000422.....	63
11EPDM-PW.....	123	20VITON.....	124	21EPDM	123	250M03020*	55	304H000482.....	63
11EPDM-TRI.....	123	210LR0060*	41	21VITON.....	124	250M03025*	55	304H000602.....	63
11EPDM71	125	210LR0073*	41	221A08042*	51	250M03026*	55	304H000762.....	63
11SILICONE.....	124	210LR0076*	41	221A08063*	51	250M04220*	55	304H000892.....	63
11VITON.....	124	210LR0089*	41	221M01142*	51	250M04225*	55	305H000342.....	63
12BUNA	124	210LR0114*	41	221M01163*	52	250M04226*	55	305H000422.....	63
12EPDM	123	210LR0139*	41	221M01180*	52	250M04230*	55	305H000482.....	63
12EPDM-DVGW	123	210LR0141*	41	221M02015*	50	250M05230*	55	305H000602.....	63
12EPDM-PW.....	123	210LR0165*	41	221M02520*	50	250M05242*	55	305H000762.....	63
12EPDM-TRI.....	123	210LR0168*	41	221M02615*	50	250M05342*	55	305H000892.....	63
12SILICONE.....	124	210LR0219*	41	221M02620*	50	250M06230*	55	30BUNA	124
12VITON.....	124	210LR0273*	41	221M03010*	50	250M06242*	55	30BUNA71	125
13BUNA	124	210LR0324*	41	221M03020*	50	250M06252*	56	30EPDM	123
13BUNA71	125	210LR0355*	41	221M03025*	50	250M06320*	56	30EPDM-DVGW	123
13EPDM	123	210LR0406*	41	221M03026*	50	250M06326*	56	30EPDM-PW.....	123
13EPDM-DVGW	123	210M00034*	40	221M04220*	50	250M06342*	56	30EPDM-TRI.....	123
13EPDM-PW.....	123	210M00042*	40	221M04225*	50	250M06352*	56	30EPDM71	125
13EPDM-TRI.....	123	210M00048*	40	221M04226*	50	250M06353*	56	30SILICONE.....	124
13EPDM71	125	210M00060*	40	221M04230*	50	250M08052*	56	30VITON.....	124
13SILICONE.....	124	210M00073*	40	221M05230*	50	250M08062*	56	310T00355*	41
13VITON.....	124	210M00076*	40	221M05242*	51	251A03025*	58	310T00406*	41
14EPDM	123	210M00089*	40	221M06230*	51	251A04225*	58	310T00457*	41
14SILICONE.....	124	210M00108*	40	221M06242*	51	251A05342*	58	310T00508*	41
14VITON.....	124	210M00114*	40	221M06320*	51	251A06353*	59	310T00610*	41
15BUNA	124	210M00133*	40	221M06325*	51	25BUNA	124	311F00073*	44
15EPDM	123	210M00139*	40	221M06326*	51	25BUNA71	125	311F00141*	44
15EPDM-DVGW	123	210M00141*	40	221M06330*	51	25EPDM	123	311F00219*	44
15EPDM-PW.....	123	210M00159*	40	221M06342*	51	25EPDM-PW.....	123	311F00273*	44
15EPDM-TRI.....	123	210M00165*	40	221M06352*	51	25EPDM-TRI.....	123	311F00324*	44
15SILICONE.....	124	210M00168*	40	221M08052*	51	25EPDM71	125	311F00355*	44
15VITON.....	124	210M00219*	40	221M08062*	51	25SILICONE.....	124	311F00406*	44
16EPDM	123	210M00273*	40	222M0139*	46	25VITON.....	124	311F00457*	44
16SILICONE.....	124	210M00324*	40	222V42262.....	54	26M00034*	47	311F00508*	44
16VITON.....	124	211A00042*	44	227M00042*	46	26M00042*	47	311F00610*	44
18EPDM	123	211A00048*	44	227M00048*	46	26M00048*	47	312F00073*	43
18VITON.....	124	211A00060*	44	227M00060*	46	26M00060*	47	312F00141*	43
1BUNA730	127	211A00089*	44	227M00073*	46	26M00073*	47	312F00165*	43
1EPDM730	127	211A00114*	44	227M00076*	46	26M00076*	47	312F00219*	43
201LR00355*	42	211A00168*	44	227M00089*	46	26M00089*	47	312F00273*	43
201LR00406*	42	211M00076*	44	227M00108*	46	26M00114*	47	312F00324*	43
201M00034*	42	211M00139*	44	227M00114*	46	26M00139*	47	312T00355*	43
201M00042*	42	211M00165*	44	227M00168*	46	26M00141*	47	312T00406*	43
201M00048*	42	212A00042*	43	227M00219*	46	26M00159*	47	312T00457*	43
201M00060*	42	212A00048*	43	227M002732	46	26M00165*	47	312T00508*	43
201M00073*	42	212A00060*	43	227M003242	46	26M00168*	47	312T00610*	43
201M00076*	42	212A00089*	43	24EPDM	123	26M00219*	47	314F00034*	61
201M00089*	42	212A00114*	43	24VITON.....	124	26M00273*	47	314F00042*	61
201M00108*	42	212A00168*	43	250A01163*	56	26M00324*	47	314F00048*	61
201M00114*	42	212M00076*	43	250A01180*	56	26BUNA	124	314F00060*	61
201M00133*	42	212M00139*	43	250A01311*	56	26BUNA71	125	314F00076*	61
201M00139*	42	219M00042*	45	250A01380*	56	26EPDM	123	314F00089*	61
201M00141*	42	219M00048*	45	250A01512*	55	26EPDM-DVGW	123	314F00114*	61
201M00159*	42	219M00060*	45	250A03015*	55	26EPDM-PW.....	123	314F00139*	61
201M00165*	42	219M00073*	45	250A06330*	56	26EPDM-TRI.....	123	314F00165*	61
201M00168*	42	219M00076*	45	250A08042*	56	26EPDM71	125	314F00168*	61
201M00219*	42	219M00089*	45	250A08063*	56	26SILICONE.....	124	314F00219*	61

* = 1 for red paint finish (RAL 3000), 2 for hot dipped galvanised finish, or 5 for painted white RAL9010 coating (where available)

Part Number Index

(Page 2 of 4)

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
314F00273*	61	322F042262	54	350T01413*	57	351T01614*	60	3BUNA730	127
314F00324*	61	325F01042*	62	350T01462*	56	351T01680*	60	3EPDM730	127
319T00355*	45	325F01052*	62	350T01463*	56	351T01813*	60	401H000344	100
319T00406*	45	325F01063*	62	350T01480*	56	351T01814*	60	401H000424	100
319T00457*	45	325F01080*	62	350T01611*	57	351T01816*	60	401H000484	100
319T00508*	45	325F01242*	62	350T01613*	57	351T02111*	60	401H000604	100
319T00610*	45	325F01263*	62	350T01614*	57	351T02113*	60	401H000764	100
321F01152*	51	325F01280*	62	350T01680*	57	351T02114*	60	401H000894	100
321F01162*	52	325F03020*	62	350T01813*	57	351T02116*	60	401H001144	100
321F01352*	52	325F03026*	62	350T01814*	57	351T02118*	60	401H001394	100
321F01362*	52	325F04220*	62	350T01816*	57	351T02411*	60	401H001684	100
321F02010*	50	325F04226*	62	350T02111*	57	351T02413*	60	401H002194	100
321F03015*	50	325F04230*	62	350T02113*	57	351T02414*	60	401H002734	100
321F05226*	50	325F05220*	62	350T02114*	57	351T02416*	60	401H003244	100
321F05325*	51	325F05230*	62	350T02116*	57	351T02418*	60	405MD00344	97
321F05330*	51	325F05242*	62	350T02118*	57	351T02421*	60	405MD00424	97
321F05342X	51	325F06220*	62	350T02411*	57	360T00355*	47	405MD00484	97
321F06220*	51	325F06230*	62	350T02413*	57	360T00406*	47	405MD00604	97
321F06226*	51	325F06242*	62	350T02414*	57	360T00457*	47	405MD00604D	97
321T01120*	51	325F06252*	62	350T02416*	57	360T00508*	47	405MD00734	97
321T01130*	51	325F06320*	62	350T02418*	57	360T00610*	47	405MD00764	97
321T01142*	51	325F06330*	62	350T02421*	57	361M00060*	49	405MD00764D	97
321T01163*	52	325F06342*	62	351F01142*	59	361M00076*	49	405MD00894	97
321T01180*	52	325F06352*	62	351F01152*	59	361M00089*	49	405MD00894D	97
321T01311*	52	325F08042*	62	351F01153*	59	361M00114*	49	405MD01144	97
321T01330*	52	325F08052*	62	351F01162*	59	361M00139*	49	405MD01144D	97
321T01342*	52	325F08063*	62	351F01163*	59	361M00141*	49	405MD01394	97
321T01363*	52	327F00141*	46	351F01180*	59	361M00165*	49	405MD01394D	97
321T01380*	52	327F00165*	46	351F01342*	59	361M00168*	49	405MD01414	97
321T01411*	52	343F00060*	34	351F01362*	59	361M00219*	49	405MD01684	97
321T01413*	52	343F00076*	34	351F01363*	59	361M00273*	49	405MD01684D	97
321T01442*	52	343F00089*	34	351F01380*	59	362M00076*	49	405MD02194	97
321T01463*	52	343F00108*	34	351F01411*	59	362M00089*	49	405MD02194D	97
321T01480*	52	343F00114*	34	351F02010*	58	362M00114*	49	407GT00422	92
321T01611*	52	343F00133*	34	351F02012*	58	362M00139*	49	407GT00482	92
321T01613*	52	343F00139*	34	351F02015*	58	362M00141*	49	407GT00602	92
321T01614*	52	343F00159*	34	351F02615*	58	362M00165*	49	407GT00732	92
321T01642*	52	343F00165*	34	351F02620*	58	362M00168*	49	407GT00892	92
321T01663*	52	343F00168*	34	351F03020*	58	362M00219*	49	407GT01142	92
321T01680*	52	343F00219*	34	351F03026*	58	362M00273*	49	407T000212	92
321T01811*	53	343F00273*	34	351F04220*	58	363M00060*	48	407T000262	92
321T01813*	53	343F00324*	34	351F04226*	58	363M00076*	48	407T000342	92
321T01814*	53	343T00355*	35	351F04230*	58	363M00089*	48	407T000422	92
321T01816*	53	343T00406*	35	351F05230*	58	363M00114*	48	407T000482	92
321T01863*	52	343T00457*	35	351F05242*	58	363M00139*	48	407T000602	92
321T01880*	53	343T00508*	35	351F06220*	58	363M00141*	48	407T000732	92
321T02111*	53	343T00610*	35	351F06230*	58	363M00165*	48	407T000892	92
321T02113*	53	344F00219*	34	351F06242*	58	363M00168*	48	407T001142	92
321T02114*	53	344F00273*	34	351F06252*	58	363M00219*	48	410H000344	100
321T02116*	53	344F00324*	34	351F06320*	58	364M00060*	48	410H000424	100
321T02118*	53	344T00355*	35	351F06330*	58	364M00076*	48	410H000484	100
321T02163*	53	344T00406*	35	351F06342*	59	364M00089*	48	410H000604	100
321T02180*	53	344T00457*	35	351F06352*	59	364M00114*	48	410H000764	100
321T02411*	53	344T00508*	35	351F08030*	59	364M00139*	48	410H000894	100
321T02413*	53	344T00610*	35	351F08042*	59	364M00141*	48	410H001144	100
321T02414*	53	350F01142*	56	351F08052*	59	364M00165*	48	410H001394	100
321T02416*	53	350F01152*	56	351F08053*	59	364M00168*	48	410H001684	100
321T02418*	53	350F01342*	56	351F08062*	59	364M00219*	48	410H002194	100
321T02421*	53	350F01362*	56	351F08063*	59	365M00060*	48	410H002734	100
321T02480*	53	350F01363*	56	351T01411*	60	365M00076*	48	410H003244	100
322F020202	54	350F02610*	55	351T01413*	60	365M00089*	48	419H000344	101
322F026202	54	350F04241*	55	351T01462*	59	365M00114*	48	419H000424	101
322F026252	54	350F06361*	56	351T01463*	59	365M00139*	48	419H000484	101
322F030202	54	350F06362*	56	351T01480*	59	365M00165*	48	419H000604	101
322F030252	54	350F08053*	56	351T01611*	60	365M00168*	48	419H000764	101
322F042202	54	350T01411*	57	351T01613*	60	365M00219*	48	419H000894	101

* = 1 for red paint finish (RAL 3000), 2 for hot dipped galvanised finish, or 5 for painted white RAL9010 coating (where available)

Refer to back cover for country-specific contact information

Part Number Index

(Page 3 of 4)

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
419H001144....101	450H042264....104	595900120....79	705MES141R....98	716AE5342x....24					
419H001394....101	450H042304....104	595900139....79	705MES165R....98	716AE6342x....24					
419H001684....101	450H052304....104	595900165....79	705MES168R....98	716AE6353x....24					
419H002194....101	450H052424....104	5BUNA730....127	705MES219R....98	716AE8063x....24					
419H002734....101	450H063424....104	5EPDM730....127	705MT0034x....21	716ME2620x....24					
419H003244....101	450H063524....104	61BUNA.....124	705MT0042x....21	716ME3026x....24					
41BUNA.....124	450H080424....104	61EPDM.....123	705MT0048x....21	716ME4226x....24					
41EPDM.....123	450H080524....104	62BUNA.....124	705MT0060x....21	716ME5242x....24					
421H011634....103	450H080634....104	62BUNA71....125	705MT0060xD....21	716ME6242x....24					
421H011804....103	460H000344....102	62EPDM.....123	705MT0073x....21	71DAE0060x....31					
421H013114....103	460H000424....102	62EPDM-PW.....123	705MT0076x....21	71DAE0076x....31					
421H013804....103	460H000484....102	62EPDM-TRI.....123	705MT0076xD....21	71DAE0089x....31					
421H020104....103	460H000604....102	62EPDM71....125	705MT0089x....21	71DAE0114x....31					
421H020124....103	460H000764....102	62SILICONE.....124	705MT0089xD....21	71DAE0165x....31					
421H020154....103	460H000894....102	62VITON.....124	705MT0108x....21	71DAE0168x....31					
421H026154....103	460H001144....102	63BUNA.....124	705MT0114x....21	71DAE0273x....31					
421H026204....103	460H001394....102	63BUNA71....125	705MT0114xD....21	71DAE8273x....31					
421H030204....103	460H001684....102	63EPDM.....123	705MT0133x....21	71DME0139x....31					
421H030264....103	460H002194....102	63EPDM-DVGW....123	705MT0139x....21	71DME0219x....31					
421H042204....103	460H002734....102	63EPDM-PW.....123	705MT0139xD....21	71DME0324x....31					
421H042264....103	460H003244....102	63EPDM-TRI.....123	705MT0141x....21	71DME8219x....31					
421H042304....103	472MD00424....96	63EPDM71....125	705MT0159x....21	71DME8324x....31					
421H052304....103	472MD00484....96	63SILICONE.....124	705MT0165x....21	725G10X10x....82					
421H052424....103	472MD00604....96	63VITON.....124	705MT0168x....21	725G12X12x....82					
421H063204....103	472MD00604D....96	6BUNA730....127	705MT0168xD....21	725G25X25x....82					
421H063264....103	472MD00734....96	6EPDM730....127	705MT0200x....21	725G2X2x....82					
421H063304....103	472MD00764....96	70006B.....122	705MT0219x....21	725G3X3x....82					
421H063424....103	472MD00764D....96	70006E.....122	705MT0219xD....21	725G4X4x....82					
421H063524....103	472MD00894....96	70008B.....122	705MT0273x....21	725G5X5x....82					
421H080424....103	472MD00894D....96	70008E.....122	705MT0273xD....21	725G6X6x....82					
421H080524....103	472MD01144....96	70009B.....122	705MT0324x....21	725G8X8x....82					
421H080634....103	472MD01144D....96	70009E.....122	7060751.....87	730AG2012x....70					
42BUNA.....124	472MD01394....96	70010B.....122	7060752.....87	730AG2015x....70					
42BUNA71.....125	472MD01394D....96	70010E.....122	7060753.....87	730AG2512x....70					
42EPDM.....123	472MD01414....96	70011B.....122	7060754.....87	730AG4212x....70					
42EPDM-DVGW....123	472MD01684....96	70011E.....122	7060755.....87	730AG4215x....70					
42EPDM-PW....123	472MD01684D....96	70013B.....122	7060756.....87	730AG6220x....71					
42EPDM-TRI....123	472MD02194....96	70013E.....122	7060757.....87	730AG6225x....71					
42EPDM71.....125	472MD02194D....96	70015B.....122	7060758.....87	730AG6226x....71					
42SILICONE....124	472MD02734....96	70015E.....122	707AE0034x....22	730AG6230x....71					
42VITON.....124	472MD02734D....96	705ME0034x....21	707AE0048x....22	730AG6242x....71					
443H000424....99	472MD03244....96	705ME0042x....21	707AE0060x....22	730AG6315x....71					
443H000484....99	4BUNA730....127	705ME0048x....21	707AE0073x....22	730AG6320x....71					
443H000604....99	4EPDM730....127	705ME0060x....21	707AE0076x....22	730AG6325x....71					
443H000764....99	51BUNA.....124	705ME0073x....21	707AE0089x....22	730AG6326x....71					
443H000894....99	51EPDM.....123	705ME0076x....21	707AE0114x....22	730AG6330x....71					
443H001144....99	52BUNA.....124	705ME0089x....21	707AE0139x....22	730AG6342x....72					
443H001394....99	52BUNA71.....125	705ME0108x....21	707AE0141x....22	730AG8020x....72					
443H001684....99	52EPDM.....123	705ME0114x....21	707AE0165x....22	730AG8025x....72					
444H002194....99	52EPDM-DVGW....123	705ME0133x....21	707AE0168x....22	730AG8026x....72					
444H002734....99	52EPDM-PW....123	705ME0139x....21	707AE0219x....23	730AG8030x....72					
444H003244....99	52EPDM-TRI....123	705ME0141x....21	707AE0273x....23	730AG8042x....72					
450H011634....104	52EPDM71....125	705ME0159x....21	707AE0324x....23	730AT2005x....67					
450H011804....104	52SILICONE....124	705ME0165x....21	707AE0355x....23	730AT2007x....67					
450H012104....104	52VITON.....124	705ME0168x....21	707AE0406x....23	730AT2010x....67					
450H013114....104	53BUNA71.....125	705ME0200x....21	707AE0457x....23	730AT2012x....67					
450H013804....104	53EPDM71.....125	705ME0219x....21	707AE0508x....23	730AT2015x....67					
450H015104....104	595900020....79	705ME0273x....21	707AE0610x....23	730AT2505x....67					
450H015124....104	595900025....79	705ME0324x....21	707ME0042x....22	730AT2507x....67					
450H020154....104	595900030....79	705MES042R....98	716AE2015x....24	730AT2510x....67					
450H026154....104	595900040....79	705MES048R....98	716AE2520x....24	730AT2512x....67					
450H026204....104	595900050....79	705MES060R....98	716AE3020x....24	730AT2515x....67					
450H030154....104	595900060....79	705MES076R....98	716AE3025x....24	730AT2605x....67					
450H030204....104	595900076....79	705MES089R....98	716AE4220x....24	730AT2607x....67					
450H030264....104	595900080....79	705MES114R....98	716AE4225x....24	730AT2610x....67					
450H042204....104	595900100....79	705MES139R....98	716AE4230x....24	730AT4212x....68					

* = 1 for red paint finish (RAL 3000), 2 for hot dipped galvanised finish, or 5 for painted white RAL9010 coating (where available)

Part Number Index

(Page 4 of 4)

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
730AT4215*	68	772AE0355*	19	774MT0165*	20	B30360EG	77	FSF0100E	91
730AT6215*	69	772AE0406*	19	774MT0168*	20	B30360EL	76	FSF0125E	91
730AT6220*	69	772AE0457*	19	774MT0219*	20	B30360TG	77	FSF0150E	91
730AT6226*	69	772AE0508*	19	774MT0273*	20	B30366EG	77	FSF0200E	91
730AT6230*	69	772AE0610*	19	774MT0324*	20	B30366EL	76	FSF0250E	91
730AT6315*	69	772ME0042*	18	7BUNA730	127	B30366TG	77	FSF0300E	91
730AT6320*	69	772ME0048*	18	7EPDM730	127	B30366TL	76	FSF1200E	91
730AT6326*	69	772ME0060*	18	8000B	122	B30380EG	77	FSF1250E	91
730AT6330*	69	772ME0073*	18	80BUNA	124	B30380EL	76	FSF1300E	91
730AT8020*	69	772ME0076*	18	80BUNA71	125	B30380TG	77	GAUGE	110
730AT8026*	69	772ME0089*	18	80EPDM	123	B30380TL	76	GRINTAPE	109
730AT8030*	69	772ME0114*	18	80EPDM-DVGW	123	BUNA2015	126	GROO10A-UK	107
730MG2520*	70	772ME0139*	18	80EPDM-PW	123	BUNA2520	126	GROOVER 01	107
730MG2612*	70	772ME0141*	18	80EPDM-TRI	123	BUNA2620	126	GROOVER 02	107
730MG2615*	70	772ME0165*	18	80EPDM71	125	BUNA3020	126	GROOVER 10A	107
730MG2620*	70	772ME0168*	18	80SILICONE	124	BUNA3025	126	HCTOOL	108
730MG3012*	70	772ME0219*	18	80VITON	124	BUNA3026	126	HOLESAW114	108
730MG3015*	70	772ME0273*	19	8BUNA730	127	BUNA4220	126	HOLESAW22	108
730MG3020*	70	772ME0324*	19	8EPDM730	127	BUNA4225	126	HOLESAW24	108
730MG4220*	70	772MT0042*	18	9BUNA730	127	BUNA4226	126	HOLESAW25	108
730MG4225*	70	772MT0048*	18	9EPDM730	127	BUNA4230	126	HOLESAW35	108
730MG4226*	70	772MT0060*	18	ALG0034	89	BUNA5242	126	HOLESAW38	108
730MG4230*	70	772MT0060*D	18	ALG0042	89	BUNA5342	126	HOLESAW44	108
730MG5315*	70	772MT0073*	18	ALG0048	89	BUNA6242	126	HOLESAW50	108
730MG5320*	71	772MT0076*	18	ALG0060	89	BUNA6342	126	HOLESAW63	108
730MG5325*	71	772MT0076*D	18	ALG0073	89	BUNA6353	126	HOLESAW70	108
730MG5326*	71	772MT0089*	18	ALG0076	89	BUNA8063	126	HOLESAW89	108
730MG5330*	71	772MT0089*D	18	ANS0089	90	CB8000505	85	HOLESAWCP	108
730MG6212*	71	772MT0114*	18	ANS0114	90	CB8000755	85	HOLESAWCP5	108
730MG6215*	71	772MT0114*D	18	ANS0139	90	CB8001005	85	HOLESAWDP	108
730MG6312*	71	772MT0139*	18	ANS0141	90	CB8001104	84	INSDIN060M	32
730MT2520*	67	772MT0139*D	18	ANS0165	90	CB8001204	84	INSDIN076M	32
730MT2612*	67	772MT0141*	18	ANS0168	90	CB8001255	85	INSDIN089M	32
730MT2615*	67	772MT0165*	18	ANS0219	90	CB8001394	84	INSDIN114M	32
730MT2620*	67	772MT0168*	18	B30310EG	77	CB8001505	85	INSDIN139M	32
730MT3005*	68	772MT0168*D	18	B30310TG	77	CB8001654	84	INSDIN165M	32
730MT3007*	68	772MT0219*	18	B30312EG	77	CB8002005	85	INSDIN168M	32
730MT3010*	68	772MT0219*D	18	B30312TG	77	CB8002504	84	INSDIN219M	32
730MT3012*	68	772MT0273*	19	B30320EG	77	CB8003004	84	INSDIN273M	32
730MT3015*	68	772MT0273*D	19	B30320EL	76	CB8004004	84	INSDIN324M	32
730MT3020*	68	772MT0324*	19	B30320TG	77	CB8005004	84	PUNCH	109
730MT4205*	68	774ME0034*	20	B30320TL	76	CB8006004	84	RJ-624	107
730MT4207*	68	774ME0042*	20	B30325EG	77	CB8007604	84	RXAG034	88
730MT4210*	68	774ME0048*	20	B30325EL	76	CB8008004	84	RXAG042	88
730MT4220*	68	774ME0060*	20	B30325TG	77	CLIP0103	26	RXAG048	88
730MT4226*	68	774ME0073*	20	B30325TL	76	CLIP0406	26	RXAG060	88
730MT4230*	68	774ME0076*	20	B30326EG	77	CLIP0812	26	RXAG076	88
730MT5315*	68	774ME0089*	20	B30326EL	76	EPDM2015	126	RXAG089	88
730MT5320*	68	774ME0114*	20	B30326TG	77	EPDM2520	126	RXAG114	88
730MT5326*	68	774ME0139*	20	B30326TL	76	EPDM2620	126	RXAG139	88
730MT5330*	68	774ME0141*	20	B30330EG	77	EPDM3020	126	RXAG168	88
730MT6212*	68	774ME0165*	20	B30330EL	76	EPDM3025	126	RXAG219	88
730MT6312*	69	774ME0168*	20	B30330TG	77	EPDM3026	126	RXAG273	88
760P000601	80	774ME0219*	20	B30330TL	76	EPDM4220	126	RXAG300	88
760P000731	80	774ME0273*	20	B30340EG	77	EPDM4225	126	STAND	107
760P000761	80	774ME0324*	20	B30340EL	76	EPDM4226	126	VR69-252	122
760P000881	80	774MT0034*	20	B30340TG	77	EPDM4230	126	ZKLM024	109
760P001141	80	774MT0042*	20	B30340TL	76	EPDM5242	126		
760P001391	80	774MT0048*	20	B30350EG	77	EPDM5342	126		
760P001651	80	774MT0060*	20	B30350EL	76	EPDM6242	126		
760P001681	80	774MT0073*	20	B30350TG	77	EPDM6342	126		
760P002191	80	774MT0076*	20	B30350TL	76	EPDM6353	126		
760P002731	80	774MT0089*	20	B30356EG	77	EPDM8063	126		
760P003241	80	774MT0114*	20	B30356EL	76	FSF0050E	91		
7706T2526*	25	774MT0139*	20	B30356TG	77	FSF0065E	91		
7706T6362*	25	774MT0141*	20	B30356TL	76	FSF0080E	91		

* = 1 for red paint finish (RAL 3000), 2 for hot dipped galvanised finish, or 5 for painted white RAL9010 coating (where available)

Refer to back cover for country-specific contact information



Figure Number Index

Figure Number	Page	Keywords	Page
Figure 201 45° Elbows .....	.42	Figure 450 Concentric Reducers .....	.104
Figure 201LR 45° Elbows.....	.42	Figure 460 End Caps .....	.102
Figure 210 90° Elbows .....	.40	Figure 472 Stainless Steel Rigid Couplings .....	.96
Figure 210LR 90° Long Radius Elbows.....	.41	Figure 705 Flexible Couplings .....	.21
Figure 211 11 1/4° Elbows .....	.44	Figure 705 Replacement Gaskets .....	.123 - .124
Figure 212 22 1/2° Elbows .....	.43	Figure 705R Rilsan Coated Flexible Coupling .....	.98
Figure 219 Tees .....	.45	Figure 70607 Metering Station .....	.87
Figure 221 Reducing Tees .....	.50 - .53	Figure 707 Heavy Duty Flexible Couplings .....	.22 - .23
Figure 222 Hydrant Tee .....	.54	Figure 707 Replacement Gaskets .....	.123 - .124
Figure 227 Cross .....	.46	Figure 71 Flange Adapters .....	.31
Figure 250 Concentric Reducers .....	.55 - .57	Figure 71 Replacement Gaskets .....	.125
Figure 251 Eccentric Reducers .....	.58 - .60	Figure 716 Flexible Reducing Couplings .....	.24
Figure 260 End Caps .....	.47	Figure 716 Replacement Gaskets .....	.126
Figure 301 45° Elbows .....	.42	Figure 725G Suction Diffuser .....	.82
Figure 304 Nipple, Machined .....	.63	Figure 730 Mechanical Tees – Grooved .....	.70 - .72
Figure 305 Nipple, Machined .....	.63	Figure 730 Mechanical Tees – Threaded .....	.67 - .69
Figure 310LR 90° Long Radius Elbows.....	.41	Figure 730 Replacement Gaskets .....	.127
Figure 311 11 1/4° Elbows .....	.44	Figure 760P "Y" Strainer .....	.80 - .81
Figure 312 22 1/2° Elbows .....	.43	Figure 7706T Transition Couplings .....	.25
Figure 314 45° Laterals .....	.61	Figure 772 Replacement Gaskets .....	.123 - .124
Figure 319 Tees .....	.45	Figure 772 Rigid Couplings .....	.18 - .19
Figure 321 Reducing Tees .....	.50 - .53	Figure 774 Replacement Gaskets .....	.123 - .124
Figure 322 Reducing Tees .....	.54	Figure 774 Rigid Couplings .....	.20
Figure 325 45° Reducing Laterals .....	.62	Figure ALG Expansion Joint .....	.89
Figure 343 Flange Adapters.....	.34	Figure ANS Expansion Joint .....	.90
Figure 344 Flange Adapters.....	.34	Figure FSF Flanged Rubber Bellows .....	.91
Figure 350 Concentric Reducers .....	.55 - .57	Figure HCTOOL Hole Cutting Tool .....	.108
Figure 351 Eccentric Reducers .....	.58 - .60	Figure PUNCH .....	.109
Figure 360 End Caps .....	.47	Figure RXAG Expansion Joint .....	.88
Figure 361, 362, 363, 364 & 365 End Caps with Threaded Outlets.....	.48 - .49	Flange Adapter Washers .....	.32
Figure 401 45° Stainless Steel Elbows .....	.100	Gauges .....	.110
Figure 405 Stainless Steel Flexible Couplings .....	.97	Model B303 Grooved End Butterfly Valves .....	.75 - .77
Figure 407GT Dielectric Waterways .....	.92	Model CB800 Circuit Balancing Valves Grooved Ends ..	.84
Figure 407T Dielectric Waterways .....	.92	Model CB800 Circuit Balancing Valves Threaded Ends ..	.85
Figure 410 90° Stainless Steel Elbows .....	.100	Model CB800 Insulation Kits .....	.86
Figure 419 Tees .....	.101	Model CB800 Valves Specifications .....	.83
Figure 421 Reducing Tees .....	.103	Model CV-1 Grooved End Check Valves .....	.78 - .79
Figure 443 Flange Adapters .....	.99	Model MC2 Measuring Computer .....	.86
Figure 444 Flange Adapters .....	.99	Pipe Preparation Tools .....	.107

10-Year Limited Warranty

Limited Warranty

Products manufactured by Johnson Controls International Plc. ("JCI") under the GRINNELL brand are warranted solely to the original Buyer for ten (10) years against defects in material and workmanship when paid for and properly installed and maintained under normal use and service, against defects in material and workmanship when paid for and properly installed and maintained under normal use and service. This warranty will expire ten (10) years from date of shipment by JCI. No warranty is given for products or components manufactured by companies not affiliated by ownership with JCI or for products and components which have been subject to misuse, improper installation or maintenance, corrosion, or other external sources of damage. Materials found by JCI to be defective shall be either repaired or replaced, at JCI's sole option. JCI neither assumes, nor authorises any person to assume for it, any other obligation in connection with the sale of products or parts of products. JCI shall not be responsible for system design errors or inaccurate or incomplete information supplied by Buyer or Buyer's representatives.



In no event shall JCI be liable, in contract, tort, strict liability or under any other legal theory, for incidental, indirect, special or consequential damages, including but not limited to labour charges, regardless of whether JCI was informed about the possibility of such damages, and in no event shall JCI's liability exceed an amount equal to the sales price.

The foregoing warranty is made in lieu of any and all other warranties, express or implied, including warranties of merchantability and fitness for a particular purpose.

This Limited Warranty sets forth the exclusive remedy for claims based on failure of or defect in products, materials or components, whether the claim is made in contract, tort, strict liability or any other legal theory.

This warranty will apply to the full extent permitted by law. The invalidity, in whole or part, of any portion of this warranty will not affect the remainder.

Global Strength.

Local Expertise.

At your service.



EMEA Regional Offices

AUSTRIA (Vienna)

Tel: +43 (0)1 271 0049
Fax: +43 (0)1 271 0142

BELGIUM (Mechelen)

Tel: +32 (0)15 285 555
Fax: +32 (0)15 206 076

CZECH REPUBLIC (Liberec)

Tel: +420 482 736 291
Fax: +420 482 736 293

FRANCE (Paris)

Tel: +33 (0)1 4817 8727
Fax: +33 (0)1 4817 8720
Info-FR@tyco-bspd.com

GERMANY (Rodgau)

Tel: +49 (0)6 106 84455
Fax: +49 (0)6 106 18177
info-de@tyco-bspd.com

HUNGARY (Budapest)

Tel: +36 (0)1 481 1383
Fax: +36 (0)1 203 4427
OrderSouthEasternEurope
@tyco-bspd.com

ITALY (Milan)

Tel: +39 (0)331 583 000
Fax: +39 (0)331 583 030
Ordini-it@tyco-bspd.com

NORWAY (Oslo)

Tel: +47 (0)67 91 77 00
Fax: +47 (0)67 91 77 15
ordreno@tyco-bspd.com

RUSSIA (Moscow)

Tel: +7 495 580 70 90

SPAIN (Madrid)

Tel: +34 (0)91 380 7460
Fax: +34 (0)91 380 7461

SWEDEN (Lammhult)

Tel: +46 (0)472 269 980
Fax: +46 (0)472 269 989
info-SE@tyco-bspd.com

THE NETHERLANDS (Enschede)

Tel: +31 (0)53 428 4444
Fax: +31 (0)53 428 3377
info-nl@tyco-bspd.com

TURKEY (Ankara)

Tel: +90 312 473 70 11
Fax: +90 312 473 73 92
salesturkey@tyco-bspd.com

TURKEY (Istanbul)

Tel: +90 216 688 64 34/35
Fax: +90 216 688 64 36
salesturkey@tyco-bspd.com

UNITED ARAB EMIRATES (Dubai)

Tel: +971 (0)4 455 0700

UK & IRELAND (Manchester)

Tel: +44 (0)161 2594 000
Fax: +44 (0)161 8750 491
OrdersUK@tyco-bspd.com



www.grinnell.com