W6000 Series (Steel) Thread-to-Connect

Eaton's W6000 Series steel quick disconnect coupling is a thread-to-connect with a rugged construction. It remains the series users refer to when it deals with severe hydraulic applications, such as construction and mining. The design and materials used give this quick disconnect coupling resistance to heavy mechanical loads. Most common examples are ram loads, hydraulic shocks and severe pulsating pressures.

Product Features

- Proprietary profile
- Thread-to-connect with double shut-off valving
- Optional dust caps and plugs (made of anodized aluminum)
- Can be connected under residual pressure up to 30 bar with standard seal, up to 150 bar with PU seal
- Standard body material: Zinc trivalent plated steel
- Standard seal material: NBR, FKM, EPDM

European Pressure Equipment Directive

Couplings with nominal diameters up to and including 25 mm are designed and manufactured under Article 4.3 of the European Pressure Equipment Directive PED 2014/68/EU. Couplings with nominal diameters greater than 25 mm are designed and manufactured in accordance with the stipulations of Module A of the European Pressure Equipment Directive PED 2014/68/EU. They should not be used to convey unstable gases.

Group 1 = Hazardous media / Group 2 = Other media

Physical Characteristics

Body Size	Nominal Flow Diameter	Max. Operating Pressure* Non hazardous liquids & gases in Group 2		Hazardous liquids & gases in Group 1		Maximum Residual Pressure during Connection***		Rated Flow**		Fluid Loss
(in)	(mm)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(lpm)	(gpm)	ml-cc.
¼	5.7	1,100	15,950	1,100	15,950	30	435	11.6	3.06	1.1
⅜	7.6	750	10,875	750	10,875	30	435	16.7	4.41	1.9
½	10.3	750	10,875	750	10,875	30	435	25.5	6.74	2.8
¾	14.2	650	9,425	650	9,425	50	725	55	14.53	5.8
1	16.5	450	6,525	450	6,525	30	435	87	22.98	10.9
1 ¼	20.5	450	6,525	450	6,525	30	435	140	36.98	26.9
1 ½	25.8	300	4,350	38	550	30	435	208	54.95	37.5
2	34.7	300	4,350	28	405	30	435	357	94.30	81

* For pulsating pressures when disconnected apply a multiplier of 0.5

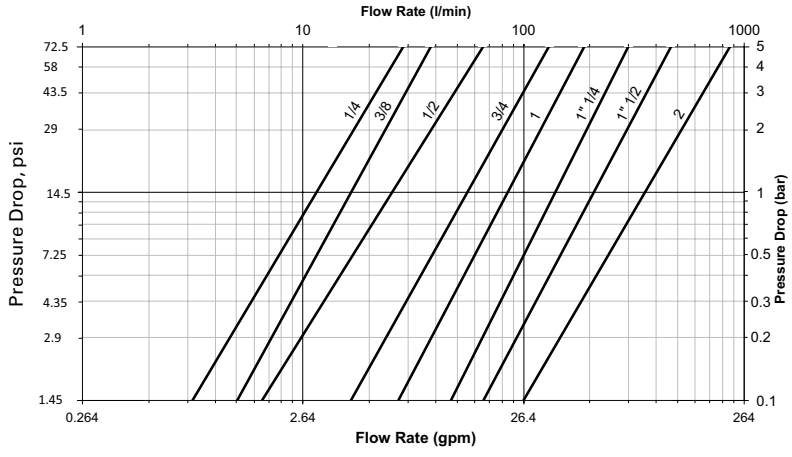
** Indicated values refer to a 1 bar/14.5 psi pressure drop.

*** When connecting under pressure, the socket nut thread must be lubricated.

Applications & Markets

- Construction
- Oil & Gas
- Material Handling
- All industrial and severe applications
- Systems subject to heavy mechanical loads, high pressures

Flow Data



Test Fluid: Oil viscosity 30 cSt at 40°C/104°F

Seal Elastomer Data*

Seal Elastomer	Max. Operation Temperature Range
NBR (Nitrile)	-20°C +100°C/-4°F +212°F
FKM	-20°C +200°C/-4°F +392°F
EPDM (Ethylene-Propylene)	-40°C +150°C/-40°F +302°F

* For reference only, based on Eaton recommended temperatures.
Contact Eaton technical support for further information on fluid compatibility.

W6000 Series (Steel) Thread-to-Connect

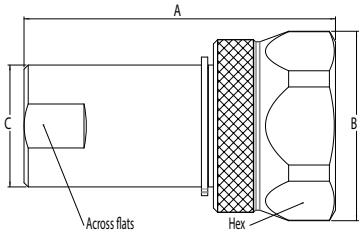


Figure 1

Sockets (Female)

Part Number			Body Size	Nominal Flow Diameter	Thread Size* (Female)				Dimensions											Weight	
NBR	FKM	EPDM	(in)	(mm)	NPT	BSPP	Metric	Fig.	A (in)	B (in)	C (in)	Across Flats (in)	Hex (in)	A (mm)	B (mm)	C (mm)	Across Flats (mm)	Hex (mm)	lbs	grams
WA0601700	WA06017V0	WA06017E0	¼	5.7	-	¼-19	-	1	2.09	1.38	0.83	0.75	1.26	53	35	21	19	32	0.32	144
WA0621700	WA06217V0	WA06217E0	¼	5.7	¼-18	-	-	1	2.09	1.38	0.83	0.75	1.26	53	35	21	19	32	0.32	144
WA0602700	WA06027V0	WA06027E0	⅜	7.6	-	⅜-19	-	1	2.56	1.50	0.98	0.90	1.38	65	38	25	23	35	0.48	217
WA0622700	WA06227V0	WA06227E0	⅜	7.6	⅜-18	-	-	1	2.56	1.50	0.98	0.90	1.38	65	38	25	23	35	0.48	217
WA0603700	WA06037V0	WA06037E0	½	10.3	-	½-14	-	1	2.91	1.77	1.14	1.06	1.61	74	45	29	27	41	0.71	320
WA0623700	WA06237V0	WA06237E0	½	10.3	½-14	-	-	1	2.91	1.77	1.14	1.06	1.61	74	45	29	27	41	0.71	320
WA0633700	WA06337V0	WA06337E0	½	10.3	-	-	M22x1.5	1	2.91	1.77	1.14	1.06	1.61	74	45	29	27	41	0.71	320
WA0604700	WA06047V0	WA06047E0	¾	14.2	-	¾-14	-	1	3.58	2.16	1.50	1.38	1.97	91	55	38	35	50	1.32	600
WA0624700	WA06247V0	WA06247E0	¾	14.2	¾-14	-	-	1	3.58	2.16	1.50	1.38	1.97	91	55	38	35	50	1.32	600
WA0605700	WA06057V0	WA06057E0	1	16.5	-	1-11	-	1	4.05	2.72	1.81	1.61	2.56	103	69	46	41	65	2.41	1092
WA0625700	WA06257V0	WA06257E0	1	16.5	1-11 ½	-	-	1	4.05	2.72	1.81	1.61	2.56	103	69	46	41	65	2.41	1092
WA0635700	WA06357V0	WA06357E0	1	16.5	-	-	M33x1.5	1	4.05	2.72	1.81	1.61	2.56	103	69	46	41	65	2.41	1092
WA0606700	WA06067V0	WA06067E0	1 ¼	20.5	-	1 ¼-11	-	1	5.71	3.50	2.36	2.16	3.03	145	89	60	55	77	6.13	2780
WA0626700	WA06267V0	WA06267E0	1 ¼	20.5	1 ¼-11 ½	-	-	1	5.71	3.50	2.36	2.16	3.03	145	89	60	55	77	6.13	2780
WA0607700	WA06077V0	WA06077E0	1 ½	25.8	-	1 ½-11	-	1	6.81	3.94	2.64	2.48	3.46	173	100	67	63	88	9.26	4200
WA0627700	WA06277V0	WA06277E0	1 ½	25.8	1 ½-11 ½	-	-	1	6.81	3.94	2.64	2.48	3.46	173	100	67	63	88	9.26	4200
WA0609700	WA06097V0	WA06097E0	2	34.7	-	2-11	-	1	8.07	4.60	3.07	2.80	4.13	205	117	78	71	105	14.64	6640
WA0629700	WA06297V0	WA06297E0	2	34.7	2-11 ½	-	-	1	8.07	4.60	3.07	2.80	4.13	205	117	78	71	105	14.64	6640

* Alternative end connections available upon request.
To obtain connected length of coupling add dimensions A (Fig.1) and G (Fig. 2) together.

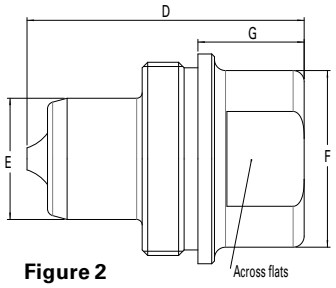


Figure 2

Plugs (Male)

Part Number			Body Size	Nominal Flow Diameter	Thread Size* (Female)				Dimensions											Weight	
NBR	FKM	EPDM	(in)	(mm)	NPT	BSPP	Metric	Fig.	D (in)	E (in)	F (in)	G (in)	Across Flats (in)	D (mm)	E (mm)	F (mm)	G (mm)	Across Flats (mm)		lbs	grams
WA0601400	WA06014V0	WA06014E0	¼	5.7	-	¼-19	-	2	1.38	0.59	0.90	0.45	0.75	35	15	23	11.5	19		0.16	71
WA0621400	WA06214V0	WA06214E0	¼	5.7	¼-18	-	-	2	1.38	0.59	0.90	0.45	0.75	35	15	23	11.5	19		0.16	71
WA0602400	WA06024V0	WA06024E0	⅜	7.6	-	⅜-19	-	2	1.65	0.75	1.02	0.52	0.90	42	19	26	13	23		0.23	104
WA0622400	WA06224V0	WA06224E0	⅜	7.6	⅜-18	-	-	2	1.65	0.75	1.02	0.52	0.90	42	19	26	13	23		0.23	104
WA0603400	WA06034V0	WA06034E0	½	10.3	-	½-14	-	2	1.97	0.87	1.26	0.77	1.06	50	22	32	19.5	27		0.36	165
WA0623400	WA06234V0	WA06234E0	½	10.3	½-14	-	-	2	1.97	0.87	1.26	0.77	1.06	50	22	32	19.5	27		0.36	165
WA0633400	WA06334V0	WA06334E0	½	10.3	-	-	M22x1.5	2	1.97	0.87	1.26	0.77	1.06	50	22	32	19.5	27		0.36	165
WA0604400	WA06044V0	WA06044E0	¾	14.2	-	¾-14	-	2	2.48	1.14	1.65	1.02	1.38	63	29	42	26	35		0.84	382
WA0624400	WA06244V0	WA06244E0	¾	14.2	¾-14	-	-	2	2.48	1.14	1.65	1.02	1.38	63	29	42	26	35		0.84	382
WA0605400	WA06054V0	WA06054E0	1	16.5	-	1-11	-	2	2.80	1.42	1.89	1.14	1.61	71	36	48	29	41		1.29	585
WA0625400	WA06254V0	WA06254E0	1	16.5	1-11 ½	-	-	2	2.80	1.42	1.89	1.14	1.61	71	36	48	29	41		1.29	585
WA0635400	WA06354V0	WA06354E0	1	16.5	-	-	M33x1.5	2	2.80	1.42	1.89	1.14	1.61	71	36	48	29	41		1.29	585
WA0606400	WA06064V0	WA06064E0	1 ¼	20.5	-	1 ¼-11	-	2	3.82	2.00	2.36	1.45	2.16	97	50.9	60	37	55		3.22	1460
WA0626400	WA06264V0	WA06264E0	1 ¼	20.5	1 ¼-11 ½	-	-	2	3.82	2.00	2.36	1.45	2.16	97	50.9	60	37	55		3.22	1460
WA0607400	WA06074V0	WA06074E0	1 ½	25.8	-	1 ½-11	-	2	4.29	2.24	2.64	1.22	2.48	109	56.9	67	31	63		4.50	2040
WA0627400	WA06274V0	WA06274E0	1 ½	25.8	1 ½-11 ½	-	-	2	4.29	2.24	2.64	1.22	2.48	109	56.9	67	31	63		4.50	2040
WA0609400	WA06094V0	WA06094E0	2	34.7	-	2-11	-	2	5.08	2.73	3.07	1.32	2.80	129	69.4	78	33	71		7.05	3200
WA0629400	WA06294V0	WA06294E0	2	34.7	2-11 ½	-	-	2	5.08	2.73	3.07	1.32	2.80	129	69.4	78	33	71		7.05	3200

* Alternative end connections available upon request.
To obtain connected length of coupling add dimensions A (Fig.1) and G (Fig. 2) together.

W6000 Series (Steel) Thread-to-Connect

Dust Plugs and Dust Caps

Body Size	Socket Dust Plug Part Number	Plug Dust Cap Part Number
(in)	Anodized Aluminum	Anodized Aluminum
¼	WD0611700	WD0611400
⅜	WD0612700	WD0612400
½	WD0613700	WD0613400
¾	WD0614700	WD0614400
1	WD0615700	WD0615400
1 ¼	WD0616700	WD0616400
1 ½	WD0617700	WD0617400
2	WD0619700	WD0619400

Seal kit for servicing sockets (Female)

Body Size	Seal & Back-up Ring Kit*		Qty
(in)	NBR seals & PTFE back-up rings	FKM seals & PTFE back-up rings	
1/4	WG0601700	WG06017V0	50 O-rings + 50 Backup rings
3/8	WG0602700	WG06027V0	50 O-rings + 50 Backup rings
1/2	WG0603700	WG06037V0	50 O-rings + 50 Backup rings
3/4	WG0604700	WG06047V0	50 O-rings + 50 Backup rings
1	WG0605700	WG06057V0	50 O-rings + 50 Backup rings
1 1/4	WG0606700	WG06067V0	15 O-rings + 15 Backup rings
1 1/2	WG0607700	WG06077V0	15 O-rings + 15 Backup rings
2	WG0609700	WG06097V0	15 O-rings + 15 Backup rings

*The valve seal is not included in our repair kits

EPDM seals (-40°C/+150°C) are also available but kit part number doesn't exist. Please ask our technical support in case you need this compound.

W6000 Series (Stainless Steel) Thread-to-Connect

Eaton's W6000 Series stainless steel quick disconnect coupling is a thread-to-connect with a rugged construction. This quick disconnect coupling utilizes 1.4418 grade stainless steel, which guarantees the same mechanical resistance as the steel version while offering excellent resistance in corrosive environments. It remains the coupling of choice in offshore oil & gas applications but also covers a wide range of alternative hydraulic applications.

Product Features

- Proprietary profile
- Thread-to-connect with double shut-off valving
- Resistance to heavy mechanical loads (hydraulic shocks, severe pulsating pressures, etc.).
- Optional dust caps and plugs (made of anodized aluminum)
- Can be connected under residual pressure
- Standard seal material: FKM, EPDM
- Standard body material: Stainless steel 1.4418 (1.4404 AISI 316L stainless steel available on request at lower operating pressures). Please contact Eaton technical support for further information

European Pressure Equipment Directive

Couplings with nominal diameters up to and including 25 mm are designed and manufactured under Article 4.3 of the European Pressure Equipment Directive PED 2014/68/EU. Couplings with nominal diameters greater than 25 mm are designed and manufactured in accordance with the stipulations of Module A of the European Pressure Equipment Directive PED 2014/68/EU. They should not be used to convey unstable gases.

Group 1 = Hazardous media /
Group 2 = Other media

Applications & Markets

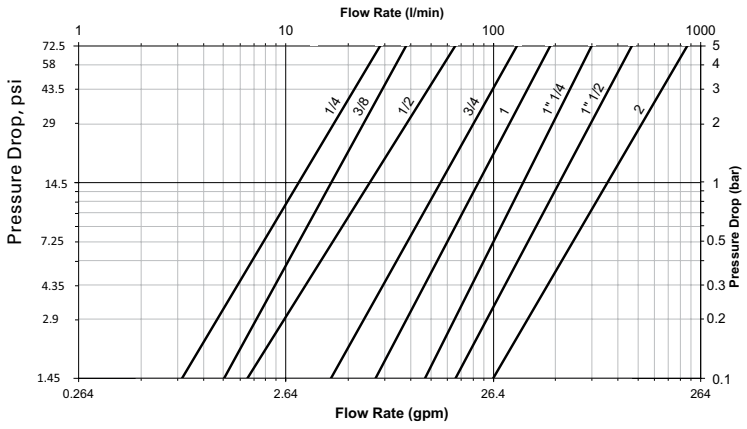
- Construction
- Oil & Gas
- Material Handling
- All industrial and severe applications
- Systems subject to heavy mechanical loads, high pressures

Physical Characteristics

Body Size	Nominal Flow Diameter	Max. Operating Pressure* Non hazardous liquids & gases Group 2		Hazardous liquids & gases Group 1		Maximum Residual Pressure during Connection***		Rated Flow**		Fluid Loss
(in)	(mm)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(lpm)	(gpm)	ml-cc.
¼	5.7	1100	15,950	1100	15,950	30	435	11.6	3.06	1.1
⅜	7.6	750	10,875	750	10,875	30	435	16.7	4.41	1.9
½	10.3	750	10,875	750	10,875	30	435	25.5	6.74	2.8
¾	14.2	650	9,425	650	9,425	50	725	55	14.53	5.8
1	16.5	450	6,525	450	6,525	30	435	87	22.98	10.9
1 ¼	20.5	450	6,525	450	6,525	30	435	140	36.98	26.9
1 ½	25.8	300	4,350	38	550	30	435	208	54.95	37.5
2	34.7	300	4,350	28	405	30	435	357	94.30	81.0

* For pulsating pressures when disconnected apply a multiplier of 0.5
** Indicated values refer to a 1 bar/14.5 psi pressure drop.
*** When connecting under pressure, the socket nut thread must be lubricated.

Flow Data



Test Fluid: Oil viscosity 30 cSt at 40°C/104°F

Seal Elastomer Data*

Seal Elastomer	Max. Operation Temperature Range
FKM	-20°C +200°C/-4°F +392°F
EPDM (Ethylene-Propylene)	-40°C +150°C/-40°F +302°F

* For reference only, based on Eaton recommended temperatures.
Contact Eaton technical support for further information on fluid compatibility.

W6000 Series (Stainless Steel) Thread-to-Connect

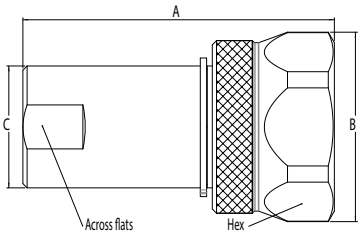


Figure 1

Sockets (Female)

Part Number*		Body Size	Nominal Flow Diameter	Thread Size** (Female)			Dimensions										Weight	
FKM	EPDM	(in)	(mm)	NPT	BSPP	Fig.	A (in)	B (in)	C (in)	Across Flats (in)	Hex (in)	A (mm)	B (mm)	C (mm)	Across Flats (mm)	Hex (mm)	lbs	grams
WV06017V0	WV06017E0	¼	5.7	-	¼-19	1	2.09	1.38	0.83	0.75	1.26	53	35	21	19	32	0.32	144
WV06217V0	WV06217E0	¼	5.7	¼-18	-	1	2.09	1.38	0.83	0.75	1.26	53	35	21	19	32	0.32	144
WV06027V0	WV06027E0	⅜	7.6	-	⅜-19	1	2.56	1.50	0.98	0.90	1.38	65	38	25	23	35	0.48	217
WV06227V0	WV06227E0	⅜	7.6	⅜-18	-	1	2.56	1.50	0.98	0.90	1.38	65	38	25	23	35	0.48	217
WV06037V0	WV06037E0	½	10.3	-	½-14	1	2.91	1.77	1.14	1.06	1.61	74	45	29	27	41	0.71	320
WV06237V0	WV06237E0	½	10.3	½-14	-	1	2.91	1.77	1.14	1.06	1.61	74	45	29	27	41	0.71	320
WV06047V0	WV06047E0	¾	14.2	-	¾-14	1	3.58	2.16	1.50	1.38	1.97	91	55	38	35	50	1.32	600
WV06247V0	WV06247E0	¾	14.2	¾-14	-	1	3.58	2.16	1.50	1.38	1.97	91	55	38	35	50	1.32	600
WV06057V0	WV06057E0	1	16.5	-	1-11	1	4.05	2.72	1.81	1.61	2.56	103	69	46	41	65	2.41	1092
WV06257V0	WV06257E0	1	16.5	1-11 ½	-	1	4.05	2.72	1.81	1.61	2.56	103	69	46	41	65	2.41	1092
WV06067V0	WV06067E0	1 ¼	20.5	-	1 ¼-11	1	5.71	3.50	2.36	2.16	3.03	145	89	60	55	77	6.13	2780
WV06267V0	WV06267E0	1 ¼	20.5	1 ¼-11 ½	-	1	5.71	3.50	2.36	2.16	3.03	145	89	60	55	77	6.13	2780
WV06077V0	WV06077E0	1 ½	25.8	-	1 ½-11	1	6.81	3.94	2.64	2.48	3.46	173	100	67	63	88	9.26	4200
WV06277V0	WV06277E0	1 ½	25.8	1 ½-11 ½	-	1	6.81	3.94	2.64	2.48	3.46	173	100	67	63	88	9.26	4200
WV06097V0	WV06097E0	2	34.7	-	2-11	1	8.07	4.60	3.07	2.80	4.13	205	117	78	71	105	14.64	6640
WV06297V0	WV06297E0	2	34.7	2-11 ½	-	1	8.07	4.60	3.07	2.80	4.13	205	117	78	71	105	14.64	6640

* 1.4404 AISI 316L stainless steel available on request. Please contact Eaton technical support for further information.
** Alternative end connections available upon request.
To obtain connected length of coupling add dimensions A (Fig.1) and G (Fig. 2) together.

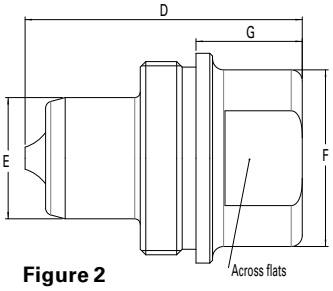


Figure 2

Plugs (Male)

Part Number*		Body Size	Nominal Flow Diameter	Thread Size** (Female)			Dimensions										Weight	
FKM	EPDM	(in)	(mm)	NPT	BSPP	Fig.	D (in)	E (in)	F (in)	G (in)	Across Flats (in)	D (mm)	E (mm)	F (mm)	G (mm)	Across Flats (mm)	lbs	grams
WV06014V0	WV06014E0	¼	5.7	-	¼-19	2	1.38	0.59	0.90	0.45	0.75	35	15	23	11.5	19	0.16	71
WV06214V0	WV06214E0	¼	5.7	¼-18	-	2	1.38	0.59	0.90	0.45	0.75	35	15	23	11.5	19	0.16	71
WV06024V0	WV06024E0	⅜	7.6	-	⅜-19	2	1.65	0.75	1.02	0.52	0.90	42	19	26	13	23	0.23	104
WV06224V0	WV06224E0	⅜	7.6	⅜-18	-	2	1.65	0.75	1.02	0.52	0.90	42	19	26	13	23	0.23	104
WV06034V0	WV06034E0	½	10.3	-	½-14	2	1.97	0.87	1.26	0.77	1.06	50	22	32	19.5	27	0.36	165
WV06234V0	WV06234E0	½	10.3	½-14	-	2	1.97	0.87	1.26	0.77	1.06	50	22	32	19.5	27	0.36	165
WV06044V0	WV06044E0	¾	14.2	-	¾-14	2	2.48	1.14	1.65	1.02	1.38	63	29	42	26	35	0.84	382
WV06244V0	WV06244E0	¾	14.2	¾-14	-	2	2.48	1.14	1.65	1.02	1.38	63	29	42	26	35	0.84	382
WV06054V0	WV06054E0	1	16.5	-	1-11	2	2.80	1.42	1.89	1.14	1.61	71	36	48	29	41	1.29	585
WV06254V0	WV06254E0	1	16.5	1-11 ½	-	2	2.80	1.42	1.89	1.14	1.61	71	36	48	29	41	1.29	585
WV06064V0	WV06064E0	1 ¼	20.5	-	1 ¼-11	2	3.82	2.00	2.36	1.45	2.16	97	50.9	60	37	55	3.22	1460
WV06264V0	WV06264E0	1 ¼	20.5	1 ¼-11 ½	-	2	3.82	2.00	2.36	1.45	2.16	97	50.9	60	37	55	3.22	1460
WV06074V0	WV06074E0	1 ½	25.8	-	1 ½-11	2	4.29	2.24	2.64	1.22	2.48	109	56.9	67	31	63	4.50	2040
WV06274V0	WV06274E0	1 ½	25.8	1 ½-11 ½	-	2	4.29	2.24	2.64	1.22	2.48	109	56.9	67	31	63	4.50	2040
WV06094V0	WV06094E0	2	34.7	-	2-11	2	5.08	2.73	3.07	1.32	2.80	129	69.4	78	33.5	71	7.05	3200
WV06294V0	WV06294E0	2	34.7	2-11 ½	-	2	5.08	2.73	3.07	1.32	2.80	129	69.4	78	33.5	71	7.05	3200

* 1.4404 AISI 316L stainless steel available on request. Please contact Eaton technical support for further information.
** Alternative end connections available upon request.
To obtain connected length of coupling add dimensions A (Fig.1) and G (Fig. 2) together.

W6000 Series (Stainless Steel) Thread-to-Connect

Dust Plugs and Dust Caps

Body Size	Socket Dust Plug Part Number	Plug Dust Cap Part Number
(in)	Anodized Aluminum	Anodized Aluminum
¼	WD0611700	WD0611400
⅜	WD0612700	WD0612400
½	WD0613700	WD0613400
¾	WD0614700	WD0614400
1	WD0615700	WD0615400
1 ¼	WD0616700	WD0616400
1 ½	WD0617700	WD0617400
2	WD0619700	WD0619400

Seal kit for servicing sockets (Female)

Body Size	Seal & Back-up Ring Kit*		Qty
(in)	NBR seals & PTFE back-up rings	FKM seals & PTFE back-up rings	
1/4	WG0601700	WG06017V0	50 O-rings + 50 Backup rings
3/8	WG0602700	WG06027V0	50 O-rings + 50 Backup rings
1/2	WG0603700	WG06037V0	50 O-rings + 50 Backup rings
3/4	WG0604700	WG06047V0	50 O-rings + 50 Backup rings
1	WG0605700	WG06057V0	50 O-rings + 50 Backup rings
1 1/4	WG0606700	WG06067V0	15 O-rings + 15 Backup rings
1 1/2	WG0607700	WG06077V0	15 O-rings + 15 Backup rings
2	WG0609700	WG06097V0	15 O-rings + 15 Backup rings

*The valve seal is not included in our repair kits

EPDM seals (-40°C/+150°C) are also available but kit part number doesn't exist. Please ask our technical support in case you need this compound.