



# rtc<sup>®</sup>

QUICK CONNECT TECHNOLOGY



# 104

rtc TYPE





**Seals**

Standart Fluorocarbone - FPM (V)

**Options**

NBR (N) -15 to + 100 °C

EPDM (E) -20 to + 150 °C

Perfluorelastomer - FFKM (W) 0 to + 270 °C

**Using Area**

- On temperature regulation applications with hot or cold water, oil etc.
- Injection moulding industries.
- On steam line.

**Materials**

Standart Type 104.04 to 104.20

Body of sockets in high resistance stainless steel

Shut-off valve of body in brass nickel plated

Absperrventil in Messing vernickelt

Body of plugs in high resistance stainless steel

Standart Type 104.25 to 104.75

Body of sockets, shut-off valve and back

adaptors in brass nickel plated

Grundkörper der Kupplung,

Absperr-Ventil in Messing vernickelt

HP - Type 104.04 to 104.25

Body of sockets and shut-off valve in

high resistance stainless steel

Body of plugs and back adaptors in high  
resistance stainless steel

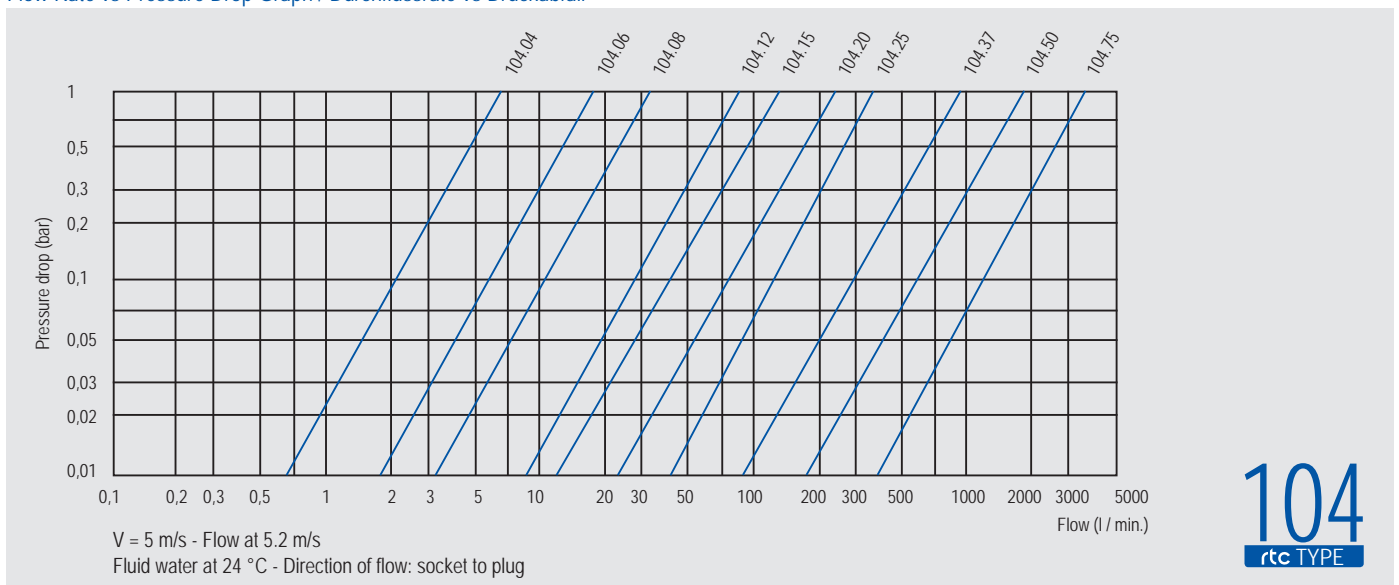




		104.04	104.06	104.08	104.12	104.15	104.20	104.25
Nominal Diameter	(mm)	4	6	8	12	15	20	25
Max. Working Pressure	Standard Version (bar)	160	160	160	160	160	160	160
	HP Version (bar)	500	500	500	250	250	250	250
Data at 5m / s	Water Flow (l / mm)	3,80	8,50	15,10	33,95	53	94,3	147,3
	Pressure Drop (bar)	0,320	0,230	0,220	0,160	0,180	0,160	0,150
Cv		0,45	1,24	2,25	5,85	8,70	16,50	25,20
Compressed Air Flow Upstream Pressure 6 Bar, $\Delta p = 0,3$ Bar	(Nm <sup>3</sup> / h)	16,1	43,5	80	211	310	577	938
Socket / Plug Repulsion Cross Section	(cm <sup>2</sup> )	0,90	1,55	2,15	4,50	6,80	11,35	17,4
Connecting Force Without Pressure	(N)	80	126	165	210	261	328	360
Min. Compensation Volume (cm <sup>3</sup> )	Socket	0,8	1,5	2,1	5,6	9,8	17,2	30,5
	Plug	0,4	0,8	1,4	4,1	7,5	14	27,03
Loss Of Fluid (2) (Water) For One Disconnection Under Pressure 2,5 Bar	(cm <sup>3</sup> )	0,0035	0,0100	0,0116	0,0200	0,0160	0,0230	0,0780

Standard Version		104.37	104.50	104.75
Nominal Diameter	(mm)	37	50	75
Max. Working Pressure	(bar)	16	16	10
Data at 5m / s	Water Flow (l / mm)	332,5	589,05	1325
	Pressure Drop (bar)	0,135	0,112	0,120
Cv		66,51	115,05	237
Compressed Air Flow Upstream Pressure 6 Bar, $\Delta p = 0,3$ Bar	(Nm <sup>3</sup> / h)	2450	4210	8500
Connecting Force Without Pressure	(N)	460	700	900
Socket / Plug Repulsion Cross Section	(cm <sup>2</sup> )	31,2	56,8	125
Min. Compensation Volume (cm <sup>3</sup> )	Socket	91,5	206,7	491
	Plug	77,5	178,6	405

Flow Rate vs Pressure Drop Graph / Durchflussrate vs Druckabfall

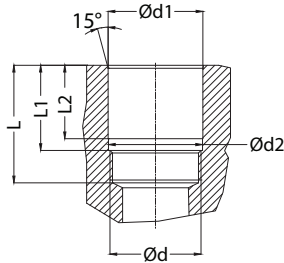




104 MP Serie Direct Assembling Sockets (Montage dimension) Kupplung für Direkteinbau mit Aussengewinde (Einbaumaße)

TYPE 104 

Sockets / Kupplungen



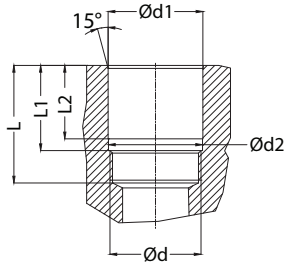
Body Size Größe	Connection Anschluss (Ød)	Ød1 G8	Ød2 F8	L + 0.1	L1 + 0.1	L2 + 0.1
04	M20x1.5	21	20.5	42	33	26
06	M24x1.5	25	24.5	42	33	26
08	M27x1.5	28	27.5	45	33	27
12	M36x1.5	37	36.5	53	33	27
15	M42x1.5	43	42.5	64	43	36
20	M52x2.0	54	53	70	46	39
25	M64x2.0	66	65	92	64	54.5



104 MP Serie Direct Assembling Plugs (Montage dimension) Nippel für Direkteinbau mit Aussengewinde (Einbaumaße)

TYPE 104 

Plug / Nippel



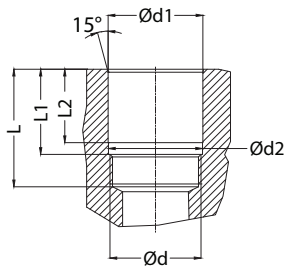
Body Size Größe	Connection Anschluss (Ød)	Ød1 G8	Ød2 F8	L + 0.1	L1 + 0.1	L2 + 0.1
04	M20x1.5	21	20.5	38	28	21.5
06	M24x1.5	25	24.5	38	28	21.5
08	M27x1.5	28	27.5	40	28	21.5
12	M36x1.5	37	36.5	48	28	21.5
15	M42x1.5	43	42.5	59	38	31.5
20	M52x2.0	54	53	67	42	35
25	M64x2.0	66	65	88	60	50



Standart Serie Direct Assembling Sockets (Montage dimension) - Standart Kupplung für Direkteinbau mit Aussengewinde (Einbaumaße)

TYPE 104 

Sockets / Kupplungen



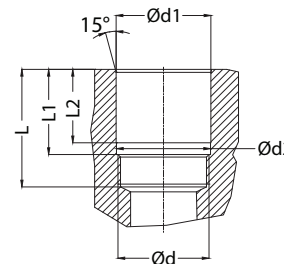
Body Size Größe	Connection Anschluss (Ød)	Ød1 G8	Ød2 F8	L + 0.1	L1 + 0.1	L2 + 0.1
04	M20x1.5	21	20.5	30	21	14
06	M24x1.5	25	24.5	30	21	14
08	M27x1.5	28	27.5	33	21	15
12	M36x1.5	37	36.5	41	21	15
15	M42x1.5	43	42.5	52	31	24
20	M52x2.0	54	53	58	34	27
25	M64x2.0	66	65	80	52	42.5



Standart Serie Direct Assembling Plugs (Montage dimension) - Standart Nippel für Direkteinbau mit Aussengewinde (Einbaumaße)

TYPE 104 

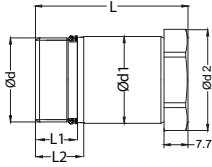
Plug / Nippel



Body Size Größe	Connection Anschluss (Ød)	Ød1 G8	Ød2 F8	L + 0.1	L1 + 0.1	L2 + 0.1
04	M20x1.5	21	20.5	26	16	9.5
06	M24x1.5	25	24.5	26	16	9.5
08	M27x1.5	28	27.5	28	16	9.5
12	M36x1.5	37	36.5	36	16	9.5
15	M42x1.5	43	42.5	47	26	19.5
20	M52x2.0	54	53	55	30	23
25	M64x2.0	66	65	76	48	38

**rtc** TYPE 104 MP Male thread socket / Kupplung mit Aussengewinde 

Sockets / Kupplungen

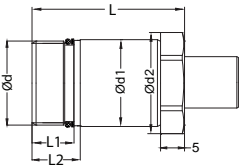


Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	L1	L2	HEX.
104.04 SMB 2015 MP	04	M20x1.5	21	25	47	11.5	14	22
104.06 SMB 2415 MP	06	M24x1.5	25	29	47	11.5	14	26
104.08 SMB 2715 MP	08	M27x1.5	28	33	49	13.5	16	29
104.12 SMB 3615 MP	12	M36x1.5	37	42	57	21.5	24	38
104.15 SMB 4215 MP	15	M42x1.5	43	47	68	22.5	25	42
104.20 SMB 5220 MP	20	M52x2.0	54	62	74.5	25.5	28.5	50
104.25 SMB 6420 MP	25	M64x2.0	66	75	96.5	32	36	55

104 MP Serie Direct Assembling Sockets  
Kupplung für Direkteinbau

**rtc** TYPE 104 MP Male thread plug / Nippel mit Aussengewinde 

Plugs / Nippel

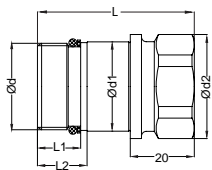


Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	L1	L2	HEX.
104.04 PMB 2015 MP	04	M20x1.5	21	25	40	11.5	14	22
104.06 PMB 2415 MP	06	M24x1.5	25	29	40	11.5	14	26
104.08 PMB 2715 MP	08	M27x1.5	28	33	42	13.5	16	29
104.12 PMB 3615 MP	12	M36x1.5	37	42	50	21.5	24	38
104.15 PMB 4215 MP	15	M42x1.5	43	47	61	22.5	25	42
104.20 PMB 5220 MP	20	M52x2.0	54	62	67.5	25.5	28.5	50
104.25 PMB 6420 MP	25	M64x2.0	66	75	89.5	32	36	55

104 MP Serie Direct Assembling Plugs  
Nippel für Direkteinbau

**rtc** TYPE 104 Male thread socket / Kupplung mit Aussengewinde 

Sockets / Kupplungen

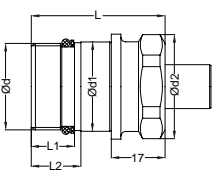


Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	L1	L2	HEX.
104.04 SMB 2015	04	M20x1.5	21	25	47	11.5	14	22
104.06 SMB 2415	06	M24x1.5	25	29	47	11.5	14	26
104.08 SMB 2715	08	M27x1.5	28	33	49	13.5	16	29
104.12 SMB 3615	12	M36x1.5	37	42	57	21.5	24	38
104.15 SMB 4215	15	M42x1.5	43	47	68	22.5	25	42
104.20 SMB 5220	20	M52x2.0	54	62	74.5	25.5	28.5	50
104.25 SMB 6420	25	M64x2.0	66	75	96.5	32	36	55

104 Serie Direct Assembling Sockets  
Kupplung für Direkteinbau

**rtc** TYPE 104 Male thread plug / Nippel mit Aussengewinde 

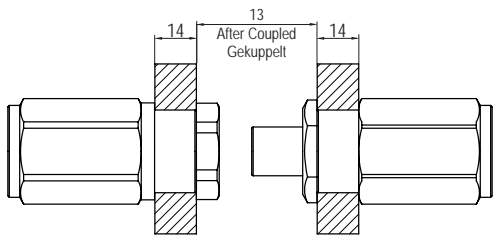
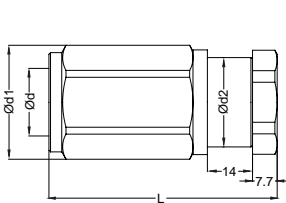
Plugs / Nippel



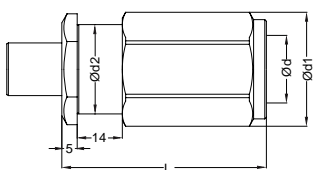
Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	L1	L2	HEX.
104.04 PMB 2015	04	M20x1.5	21	25	40	11.5	14	22
104.06 PMB 2415	06	M24x1.5	25	29	40	11.5	14	26
104.08 PMB 2715	08	M27x1.5	28	33	42	13.5	16	29
104.12 PMB 3615	12	M36x1.5	37	42	50	21.5	24	38
104.15 PMB 4215	15	M42x1.5	43	47	61	22.5	25	42
104.20 PMB 5220	20	M52x2.0	54	62	67.5	25.5	28.5	50
104.25 PMB 6420	25	M64x2.0	66	75	89.5	32	36	55

104 Serie Direct Assembling Plugs  
Nippel für Direkteinbau

**rtc** TYPE 104 MP Sockets / Kupplungen



**rtc** TYPE 104 MP Plugs / Nippel



104.04 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.04 SFB 13 MP	04	BSP 1/4	25	21	47	22
104.04 SQB 13 MP	04	BSPT 1/4	25	21	47	22
104.04 SNB 13 MP	04	NPT 1/4	25	21	47	22
104.04 SUB 1120 MP	04	UNF 7/16-20	25	21	47	22

104.04 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.04 PFB 13 MP	04	BSP 1/4	25	21	58	22
104.04 PQB 13 MP	04	BSPT 1/4	25	21	58	22
104.04 PNB 13 MP	04	NPT 1/4	25	21	58	22
104.04 PUB 1120 MP	04	UNF 7/16-20	25	21	58	22

104.06 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.06 SFB 17 MP	06	BSP 3/8	29	25	66.5	26
104.06 SQB 17 MP	06	BSPT 3/8	29	25	66.5	26
104.06 SNB 17 MP	06	NPT 3/8	29	25	66.5	26
104.06 SUB 1420 MP	06	UNF 9/16-20	29	25	66.5	26

104.06 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.06 PFB 17 MP	06	BSP 3/8	29	25	59.5	26
104.06 PQB 17 MP	06	BSPT 3/8	29	25	59.5	26
104.06 PNB 17 MP	06	NPT 3/8	29	25	59.5	26
104.06 PUB 1420 MP	06	UNF 9/16-20	29	25	59.5	26

104.08 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.08 SFB 21 MP	08	BSP 1/2	32.5	28	72.5	30
104.08 SQB 21 MP	08	BSPT 1/2	32.5	28	72.5	30
104.08 SNB 21 MP	08	NPT 1/2	32.5	28	72.5	30
104.08 SUB 1420 MP	08	UNF 9/16-18	32.5	28	72.5	30

104.08 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.08 PFB 21 MP	08	BSP 1/2	33	28	64	30
104.08 PQB 21 MP	08	BSPT 1/2	33	28	64	30
104.08 PNB 21 MP	08	NPT 1/2	33	28	64	30
104.08 PUB 1418 MP	08	UNF 9/16-18	33	28	64	30

104.12 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.12 SFB 26 MP	12	BSP 3/4	42	37	83	38
104.12 SQB 26 MP	12	BSPT 3/4	42	37	83	38
104.12 SNB 26 MP	12	NPT 3/4	42	37	83	38
104.12 SUB 2214 MP	12	UNF 7/8-14	42	37	83	38

104.12 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.12 PFB 26 MP	12	BSP 3/4	42	37	75.5	38
104.12 PQB 26 MP	12	BSPT 3/4	42	37	75.5	38
104.12 PNB 26 MP	12	NPT 3/4	42	37	75.5	38
104.12 PUB 2214 MP	12	UNF 7/8-14	42	37	75.5	38

104.15 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.15 SFB 26 MP	15	BSP 3/4	47	43	93	44
104.15 SQB 26 MP	15	BSPT 3/4	47	43	93	44
104.15 SNB 26 MP	15	NPT 3/4	47	43	93	44
104.15 SUB 2712 MP	15	UNF 1-1/16-12	47	43	93	44

104.15 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.15 PFB 26 MP	15	BSP 3/4	47	43	86	44
104.15 PQB 26 MP	15	BSPT 3/4	47	43	86	44
104.15 PNB 26 MP	15	NPT 3/4	47	43	86	44
104.15 PUB 2712 MP	15	UNF 1-1/16-12	47	43	86	44

104.20 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.20 SFB 33 MP	20	BSP 1	62	54	106	55
104.20 SQB 33 MP	20	BSPT 1	62	54	106	55
104.20 SNB 33 MP	20	NPT 1	62	54	106	55
104.20 SUB 3312 MP	20	UNF 1-5/16-12	62	54	106	55

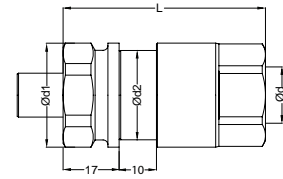
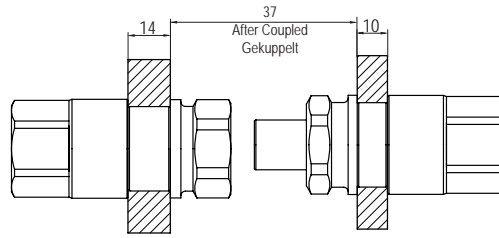
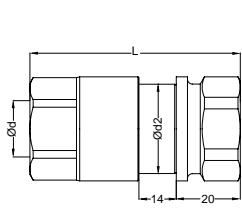
104.20 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.20 PFB 33 MP	20	BSP 1	62	54	99	55
104.20 PQB 33 MP	20	BSPT 1	62	54	99	55
104.20 PNB 33 MP	20	NPT 1	62	54	99	55
104.20 PUB 3312 MP	20	UNF 1-5/16-12	62	54	99	55

104.25 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.25 SFB 42 MP	25	BSP 1-1/4	75	66	112.5	65
104.25 SQB 42 MP	25	BSPT 1-1/4	75	66	112.5	65
104.25 SNB 42 MP	25	NPT 1-1/4	75	66	112.5	65
104.25 SUB 4212 MP	25	UNF 1-5/8-12	75	66	112.5	65

104.25 MP Order No / Bestellnr.	Body Size Größe	Connection Anschluss (D)	D1	D2	L	HEX.
104.25 PFB 42 MP	25	BSP 1-1/4	75	66	121	65
104.25 PQB 42 MP	25	BSPT 1-1/4	75	66	121	65
104.25 PNB 42 MP	25	NPT 1-1/4	75	66	121	65
104.25 PUB 4212 MP	25	UNF 1-5/8-12	75	66	121	65

**rtc** TYPE 104

Sockets / Kupplungen



**rtc** TYPE 104

Plugs / Nippel



104.04	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.04 SFB 13	04	BSP 1/4	25	21	65	22
104.04 SQB 13	04	BSPT 1/4	25	21	65	22
104.04 SNB 13	04	NPT 1/4	25	21	65	22
104.04 SUB 1120	04	UNF 7/16-20	25	21	65	22

104.04	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.04 PFB 13	04	BSP 1/4	25	21	58	19
104.04 PQB 13	04	BSPT 1/4	25	21	58	19
104.04 PNB 13	04	NPT 1/4	25	21	58	19
104.04 PUB 1120	04	UNF 7/16-20	25	21	58	19

104.06	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.06 SFB 17	06	BSP 3/8	29	25	66.5	26
104.06 SQB 17	06	BSPT 3/8	29	25	66.5	26
104.06 SNB 17	06	NPT 3/8	29	25	66.5	26
104.06 SUB 1420	06	UNF 9/16-20	29	25	66.5	26

104.06	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.06 PFB 17	06	BSP 3/8	29	25	59.5	26
104.06 PQB 17	06	BSPT 3/8	29	25	59.5	26
104.06 PNB 17	06	NPT 3/8	29	25	59.5	26
104.06 PUB 1420	06	UNF 9/16-20	29	25	59.5	26

104.08	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.08 SFB 21	08	BSP 1/2	33	28	71.5	29
104.08 SQB 21	08	BSPT 1/2	33	28	71.5	29
104.08 SNB 21	08	NPT 1/2	33	28	71.5	29
104.08 SUB 1418	08	UNF 9/16-18	33	28	71.5	29

104.08	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.08 PFB 21	08	BSP 1/2	33	28	65.5	30
104.08 PQB 21	08	BSPT 1/2	33	28	65.5	30
104.08 PNB 21	08	NPT 1/2	33	28	65.5	30
104.08 PUB 1418	08	UNF 9/16-18	33	28	65.5	30

104.12	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.12 SFB 26	12	BSP 3/4	42	37	82.5	38
104.12 SQB 26	12	BSPT 3/4	42	37	82.5	38
104.12 SNB 26	12	NPT 3/4	42	37	82.5	38
104.12 SUB 2214	12	UNF 7/8-14	42	37	82.5	38

104.12	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.12 PFB 26	12	BSP 3/4	42	37	75.5	38
104.12 PQB 26	12	BSPT 3/4	42	37	75.5	38
104.12 PNB 26	12	NPT 3/4	42	37	75.5	38
104.12 PUB 2214	12	UNF 7/8-14	42	37	75.5	38

104.15	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.15 SFB 26	15	BSP 3/4	50	43	93	42
104.15 SQB 26	15	BSPT 3/4	50	43	93	42
104.15 SNB 26	15	NPT 3/4	50	43	93	42
104.15 SUB 2712	15	UNF 1-1/16-12	50	43	93	42

104.15	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.15 PFB 26	15	BSP 3/4	50	43	86	42
104.15 PQB 26	15	BSPT 3/4	50	43	86	42
104.15 PNB 26	15	NPT 3/4	50	43	86	42
104.15 PUB 2712	15	UNF 1-1/16-12	50	43	86	42

104.20	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.20 SFB 33	20	BSP 1	62	54	106	55
104.20 SQB 33	20	BSPT 1	62	54	106	55
104.20 SNB 33	20	NPT 1	62	54	106	55
104.20 SUB 3312	20	UNF 1-5/16-12	62	54	106	55

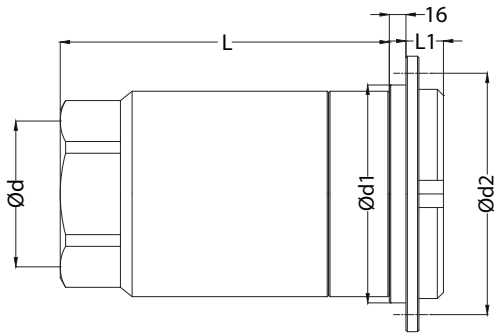
104.20	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.20 PFB 33	20	BSP 1	62	54	99	55
104.20 PQB 33	20	BSPT 1	62	54	99	55
104.20 PNB 33	20	NPT 1	62	54	99	55
104.20 PUB 3312	20	UNF 1-5/16-12	62	54	99	55

104.25	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.25 SFB 42	25	BSP 1-1/4	75	66	128	65
104.25 SQB 42	25	BSPT 1-1/4	75	66	128	65
104.25 SNB 42	25	NPT 1-1/4	75	66	128	65
104.25 SUB 4212	25	UNF 1-5/8-12	75	66	128	65

104.25	Body Size	Connection	D1	D2	L	HEX.
Order No / Bestellnr.	Größe	Anschluss (D)				
104.25 PFB 42	25	BSP 1-1/4	75	66	121	65
104.25 PQB 42	25	BSPT 1-1/4	75	66	121	65
104.25 PNB 42	25	NPT 1-1/4	75	66	121	65
104.25 PUB 4212	25	UNF 1-5/8-12	75	66	121	65

rtc TYPE 104

Sockets / Kupplungen



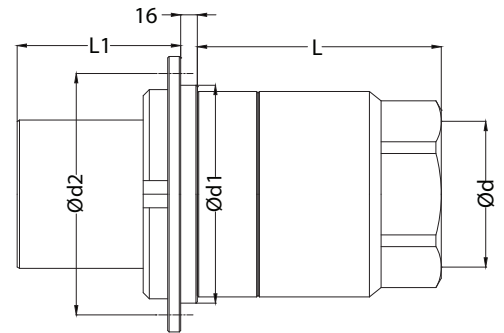
104.37	Body Size Größe	Connection Anschluss (D)	D1	D2	L	L1	HEX.
Order No / Bestellnr.							
104.37 SFB 48	37	BSP 1-1/2	96	108	151	20	75
104.37 SNB 48	37	NPT 1-1/2	96	108	151	20	75

104.50	Body Size Größe	Connection Anschluss (D)	D1	D2	L	L1	HEX.
Order No / Bestellnr.							
104.50 SFB 60	50	BSP 2	124	136	174	20	90
104.50 SNB 60	50	NPT 2	124	136	174	20	90

104.75	Body Size Größe	Connection Anschluss (D)	D1	D2	L	L1	HEX.
Order No / Bestellnr.							
104.75 SFB 88	75	BSP 3	171	183	232	20	120
104.75 SNB 88	75	NPT 3	171	183	232	20	120

rtc TYPE 104

Plugs / Nippel



104.37	Body Size Größe	Connection Anschluss (D)	D1	D2	L	L1	HEX.
Order No / Bestellnr.							
104.37 PFB 48	37	BSP 1-1/2	96	108	147	72	75
104.37 PNB 48	37	NPT 1-1/2	96	108	147	72	75

104.50	Body Size Größe	Connection Anschluss (D)	D1	D2	L	L1	HEX.
Order No / Bestellnr.							
104.50 PFB 60	50	BSP 2	124	136	170	86	90
104.50 PNB 60	50	NPT 2	124	136	170	86	90

104.75	Body Size Größe	Connection Anschluss (D)	D1	D2	L	L1	HEX.
Order No / Bestellnr.							
104.75 PFB 88	75	BSP 3	171	183	228	121	120
104.75 PNB 88	75	NPT 3	171	183	228	121	120