



Blackfire[®]: fire resistant push-fit waste system

Blackfire[®]: Feuerbeständiges Abwasserstecksystem

BLACKFIRE RANGE
SORTIMENT BLACKFIRE**BLACKFIRE®**, CHALLENGE IT!
BLACKFIRE®, TESTE ES

Valsir Blackfire® is a drainage system made of pipes, fittings and accessories, perfect for drainage systems and conventional rainwater drainage systems.

Blackfire®, just like any other Valsir drainage system, is a push-fit system distinguished by a quick and easy installation.

Moreover, Valsir Blackfire® allows to reach good results in terms of acoustic comfort and in terms of fire resistance (B1 according to the norm DIN 4102).

It is perfect for high and low temperature drainage systems, drainage ventilation systems and rainwater drainage systems, within any sort of building: hospitals, hotels, residential or commercial.

The wide range of pipes, fittings and accessories allows to cover every point of the drainage system, from the horizontal branches, to the stacks to the collector.

Valsir Blackfire® ist das Abflusssystem aus Rohren, Formstücken und Zubehör für Entwässerungssysteme.

Das Blackfire® System ist wie andere Valsir-Abwassersysteme ein Stecksystem, das sich durch einfache und schnelle Installation auszeichnet.

Neben diesen Eigenschaften erzielt Valsir Blackfire® gute Ergebnisse hinsichtlich des akustischen Komforts und der Feuerbeständigkeit; nach DIN 4102 B1.

Ideal für Nieder- und Hochtemperaturentwässerungssysteme, Abluftsysteme und Regenwassersysteme in Gebäuden für Zivil- und Industriezwecke, Krankenhäuser und Hotels.

Das breite Angebot an Rohren, Formstücken und Zubehör ermöglicht die Erstellung der gesamten Abflussanlage, von den Abzweigungen für die sanitären Anlagen bis hin zu den Fall- und Abwassersammelleitungen.

- Ease of installation: thanks to the push-fit connection, there is no need of glues or harmful solvents.
 - Inner white layer to make video inspection easier.
 - Fire resistance in class B1.
 - Mechanical resistance: very high resistance to mechanical stress; even to impacts up to -10°C.
 - Good acoustic comfort.
 - Resistant to negative pressure up to -800 mbar and to positive pressure of 1.5 bar.
 - High chemical resistance to substances dissolved in civil and industrial wastewater.
 - Wide range of pipes and fittings: from Ø 32 mm to Ø 160 mm.
 - Exceptional resistance to UV rays. Outside storage and installation are allowed without risks of damage or colour fading.
 - Tailor-made fittings available in order to meet every design and installation requirement.
 - Valsir Blackfire® is environment-friendly since it is produced with completely recyclable raw materials.
 - Compatibility with all the other Valsir waste systems.
 - Possibility of connection with other materials such as cast iron, PE, PVC and PP.
- *Einfache Installation: Dank der Steckverbindung sind keine Klebstoffe oder schädliche Lösungsmittel erforderlich.*
 - *Weisse Innenfläche, um Videoinspektionsvorgänge zu erleichtern.*
 - *Feuerwiderstand Klasse B1.*
 - *Mechanische Beständigkeit: sehr hohe mechanische Belastbarkeit, auch bei Stößen bis -10°C.*
 - *Guter akustischer Komfort.*
 - *System resistent gegen Unterdrücke bis -800 mbar und Überdrücke bis 1,5 bar.*
 - *Hohe chemische Beständigkeit gegen in Zivil- und Industrieabwässern gelöste Substanzen.*
 - *Große Auswahl an Rohren und Formstücken: von Ø 32 bis Ø 160 mm.*
 - *Außergewöhnliche Beständigkeit gegen UV-Strahlen. Lagerung und Aufstellung im Freien sind ohne Verfärbung oder Beschädigung zulässig.*
 - *Speziell angefertigte Formteile für alle Design- und Installationsanforderungen möglich.*
 - *Valsir Blackfire® ist ökologisch grün, da es aus vollständig recycelbarem Material hergestellt wird.*
 - *Kompatibel mit allen anderen Valsir Abwassersystemen.*
 - *Anschluss mit anderen Materialien wie Gusseisen, PE, PVC und PP möglich.*

DBT

Fraunhofer

Hoch

Fladungen



DE



UKR SEPRO



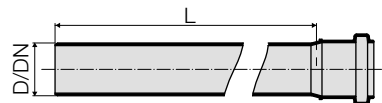
UA

BLACKFIRE RANGE

SORTIMENT BLACKFIRE

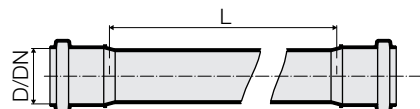
HTEM Single socket pipe

HTEM Abflussrohr mit Steckmuffe und Gummidichtring

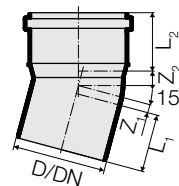


COD.	D	DN	L	kg				HxLxP	CL	€/pz
VS0660001	32	30	150	0,041	20	320	2240	1351x800x1200	BF01	1,76
VS0660003	32	30	250	0,060	32	256	2304	1476x800x1200	BF01	2,31
VS0660005	32	30	500	0,105	28	168	1344	1406x800x1200	BF01	3,22
VS0660007	32	30	1000	0,197	24	120	840	1200x1100x1200	BF01	4,98
VS0660009	32	30	1500	0,289	24	120	840	1200x1600x1200	BF01	7,65
VS0660011	32	30	2000	0,380	24	120	840	1200x2100x1200	BF01	9,23
VS0660013	32	30	3000	0,563	24	120	840	1200x3100x1200	BF01	13,95
VS0660021	40	40	150	0,054	36	288	1728	1386x800x1200	BF01	1,76
VS0660023	40	40	250	0,076	30	240	1200	1301x800x1200	BF01	2,31
VS0660025	40	40	500	0,131	54	216	1080	1501x800x1200	BF01	3,22
VS0660027	40	40	1000	0,242	20	100	500	1075x1130x1220	BF01	4,98
VS0660029	40	40	1500	0,353	20	100	500	1075x1630x1220	BF01	7,65
VS0660031	40	40	2000	0,464	20	100	500	1075x2130x1220	BF01	9,23
VS0660033	40	40	3000	0,686	20	100	500	1075x3130x1220	BF01	14,92
VS0660041	50	50	150	0,075	32	256	1280	1301x800x1200	BF01	2,06
VS0660043	50	50	250	0,106	30	240	960	1426x800x1200	BF01	2,43
VS0660045	50	50	500	0,185	35	140	700	1501x800x1200	BF01	3,46
VS0660047	50	50	1000	0,342	30	120	360	1140x1130x1200	BF01	4,98
VS0660049	50	50	1500	0,500	30	120	360	1140x1630x1200	BF01	8,13
VS0660051	50	50	2000	0,657	30	120	360	1140x2130x1200	BF01	10,25
VS0660053	50	50	3000	0,972	30	120	360	1140x3130x1200	BF01	16,01
VS0660061	75	70	150	0,132	30	240	480	1096x800x1200	BF01	3,83
VS0660063	75	70	250	0,188	20	120	480	1466x800x1200	BF01	4,43
VS0660065	75	70	500	0,329	20	80	320	1426x800x1200	BF01	6,01
VS0660067	75	70	1000	0,612	20	60	180	1150x1150x1260	BF01	8,68
VS0660069	75	70	1500	0,894	20	60	180	1150x1650x1260	BF01	12,32
VS0660071	75	70	2000	1,177	20	60	180	1150x2150x1260	BF01	16,20
VS0660073	75	70	3000	1,742	20	60	180	1150x3150x1260	BF01	24,02
VS0660081	90	90	150	0,189	24	96	480	1301x800x1200	BF01	4,25
VS0660083	90	90	250	0,267	24	96	384	1466x800x1200	BF01	5,40
VS0660085	90	90	500	0,461	24	96	192	1300x800x1200	BF01	8,19
VS0660087	90	90	1000	0,848	10	-	120	1140x1150x1200	BF01	12,87
VS0660089	90	90	1500	1,236	10	-	120	1140x1650x1200	BF01	17,83
VS0660091	90	90	2000	1,623	10	-	120	1140x2150x1200	BF01	24,45
VS0660093	90	90	3000	2,398	10	-	120	1140x3150x1200	BF01	35,42
VS0660101	110	100	150	0,279	20	120	240	1106x800x1200	BF01	4,98
VS0660103	110	100	250	0,393	15	60	240	1466x800x1200	BF01	6,07
VS0660105	110	100	500	0,678	15	60	120	1300x800x1200	BF01	9,28
VS0660107	110	100	1000	1,248	15	30	90	1210x1180x1200	BF01	14,50
VS0660109	110	100	1500	1,818	15	30	90	1210x1680x1200	BF01	20,26

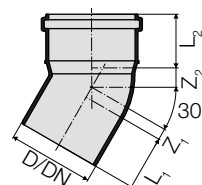
COD.	D	DN	L	kg				HxLxP 	CL	€/pz
VS0660111	110	100	2000	2,388	15	30	90	1210x2180x1200	BF01	27,35
VS0660113	110	100	3000	3,528	15	30	90	1210x3180x1200	BF01	39,54
VS0660121	125	125	150	0,366	10	40	200	1326x800x1200	BF01	7,16
VS0660123	125	125	250	0,511	11	44	176	1466x800x1200	BF01	9,17
VS0660125	125	125	500	0,873	6	48	96	1340x800x1200	BF01	13,29
VS0660127	125	125	1000	1,598	8	16	64	1200x1170x1200	BF01	21,47
VS0660129	125	125	1500	2,323	8	16	64	1200x1670x1200	BF01	29,36
VS0660131	125	125	2000	3,048	8	16	64	1200x2170x1200	BF01	39,67
VS0660133	125	125	3000	4,498	8	16	64	1200x3170x1200	BF01	56,16
VS0660141	160	150	150	0,647	6	24	120	1401x800x1200	BF01	11,28
VS0660143	160	150	250	0,896	6	24	72	1191x800x1200	BF01	13,65
VS0660145	160	150	500	1,518	6	24	48	1336x800x1200	BF01	21,23
VS0660147	160	150	1000	2,763	6	12	36	1180x1190x1200	BF01	33,67
VS0660149	160	150	1500	4,008	6	12	36	1180x1690x1200	BF01	46,45
VS0660151	160	150	2000	5,253	6	12	36	1180x2190x1200	BF01	62,64
VS0660153	160	150	3000	7,743	6	12	36	1180x3190x1200	BF01	89,82

BLACKFIRE RANGE
SORTIMENT BLACKFIRE**HTEM Double socket
pipe***HTEM Rohr mit
2 Steckmuffen*

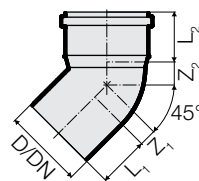
COD.	D	DN	L	kg				HxLxP 	CL	€/pz
VS0660205	32	30	500	0,119	30	180	1080	1476x800x1200	BF01	4,49
VS0660207	32	30	1000	0,211	24	120	840	1200x1200x1200	BF01	6,37
VS0660209	32	30	1500	0,302	24	120	840	1200x1700x1200	BF01	9,17
VS0660211	32	30	2000	0,394	24	120	840	1200x2200x1200	BF01	11,10
VS0660213	32	30	3000	0,577	24	120	840	1200x3200x1200	BF01	16,32
VS0660225	40	40	500	0,152	35	280	560	1386x800x1200	BF01	4,55
VS0660227	40	40	1000	0,263	20	100	500	1075x1180x1220	BF01	6,44
VS0660229	40	40	1500	0,374	20	100	500	1075x1680x1220	BF01	9,23
VS0660231	40	40	2000	0,485	20	100	500	1075x2180x1220	BF01	11,28
VS0660233	40	40	3000	0,707	20	100	500	1075x3180x1220	BF01	18,14
VS0660245	50	50	500	0,212	24	192	384	1386x800x1200	BF01	5,10
VS0660247	50	50	1000	0,370	30	120	360	1150x1180x1200	BF01	6,98
VS0660249	50	50	1500	0,527	30	120	360	1150x1680x1200	BF01	9,76
VS0660251	50	50	2000	0,685	30	120	360	1150x2180x1200	BF01	12,32
VS0660253	50	50	3000	1,000	30	120	360	1150x3180x1200	BF01	19,29
VS0660265	75	70	500	0,376	12	96	192	1396x800x1200	BF01	7,05
VS0660267	75	70	1000	0,659	10	30	180	1150x1180x1260	BF01	10,67
VS0660269	75	70	1500	0,941	10	30	180	1150x1680x1260	BF01	14,74
VS0660271	75	70	2000	1,224	10	30	180	1150x2180x1260	BF01	19,16
VS0660273	75	70	3000	1,789	10	30	180	1150x3180x1260	BF01	28,62
VS0660285	90	90	500	0,534	10	70	140	1436x800x1200	BF01	9,28
VS0660287	90	90	1000	0,921	10	-	120	1140x1190x1200	BF01	14,80
VS0660289	90	90	1500	1,309	10	-	120	1140x1690x1200	BF01	20,26
VS0660291	90	90	2000	1,696	10	-	120	1140x2190x1200	BF01	29,60
VS0660293	90	90	3000	2,471	10	-	120	1140x3190x1200	BF01	42,95
VS0660305	110	100	500	0,785	9	54	108	1456x800x1200	BF01	12,13
VS0660307	110	100	1000	1,355	10	20	80	1100x1230x1200	BF01	18,44
VS0660309	110	100	1500	1,925	10	20	80	1100x1730x1200	BF01	24,32
VS0660311	110	100	2000	2,495	10	20	80	1100x2230x1200	BF01	32,87
VS0660313	110	100	3000	3,635	10	20	80	1100x3230x1200	BF01	47,67
VS0660325	125	125	500	1,021	6	36	72	1480x800x1200	BF01	18,08
VS0660327	125	125	1000	1,746	8	16	64	1200x1230x1200	BF01	26,63
VS0660329	125	125	1500	2,471	8	16	64	1200x1730x1200	BF01	35,06
VS0660331	125	125	2000	3,196	8	16	64	1200x2230x1200	BF01	47,67
VS0660333	125	125	3000	4,646	8	16	64	1200x3230x1200	BF01	66,41

BLACKFIRE RANGE
SORTIMENT BLACKFIRE**HTB 15° bend***HTB Bogen 15°*

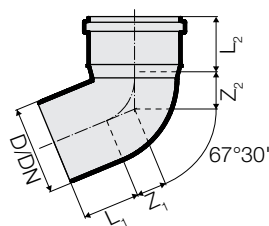
COD.	D	DN	Z ₁	L ₁	Z ₂	L ₂	kg				HxLxP	CL	€/pz
VS0660401	32	30	3	48	6	44	0,022	80	640	4480	1000x800x1200	BF02	1,91
VS0660411	40	40	4	47	8	44	0,031	50	400	2000	1030x800x1200	BF02	2,03
VS0660421	50	50	4	48	8	46	0,039	30	240	1680	1110x800x1200	BF02	2,64
VS0660431	75	70	7	53	11	52	0,087	20	160	640	1010x800x1200	BF02	4,29
VS0660441	90	90	8	56	14	56	0,130	20	160	480	1015x800x1200	BF02	5,90
VS0660451	110	100	9	61	16	59	0,194	20	80	240	970x800x1200	BF02	6,62
VS0660461	125	125	10	66	17	64	0,280	20	80	160	940x800x1200	BF02	12,26
VS0660471	160	150	-	82	18	77	0,541	1	-	100	930x800x1200	BF02	19,29

HTB 30° bend*HTB Bogen 30°*

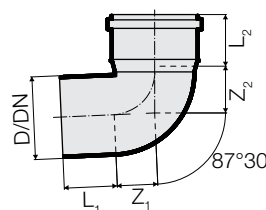
COD.	D	DN	Z ₁	L ₁	Z ₂	L ₂	kg				HxLxP	CL	€/pz
VS0660403	32	30	5	48	8	44	0,022	80	640	4480	1000x800x1200	BF02	1,91
VS0660413	40	40	7	47	10	44	0,032	50	400	2000	1030x800x1200	BF02	2,03
VS0660423	50	50	8	48	12	46	0,041	30	240	1680	1110x800x1200	BF02	2,64
VS0660433	75	70	12	53	17	52	0,093	20	160	640	1010x800x1200	BF02	4,29
VS0660443	90	90	14	56	20	56	0,154	20	80	320	1080x800x1200	BF02	5,90
VS0660453	110	100	17	61	23	59	0,214	20	80	240	970x800x1200	BF02	6,62
VS0660463	125	125	18	66	26	64	0,312	20	80	160	940x800x1200	BF02	12,26
VS0660473	160	150	-	82	29	77	0,556	1	-	90	930x800x1200	BF02	19,29

BLACKFIRE RANGE
SORTIMENT BLACKFIRE**HTB 45° bend***HTB Bogen 45°*

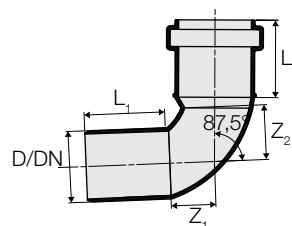
COD.	D	DN	Z ₁	L ₁	Z ₂	L ₂	kg				HxLxP	CL	€/pz
VS0660405	32	30	8	45	10	44	0,023	80	640	3200	1000x800x1200	BF02	1,91
VS0660415	40	40	10	47	14	44	0,033	50	400	2000	1030x800x1200	BF02	1,91
VS0660425	50	50	11	48	17	46	0,041	30	240	1200	1030x800x1200	BF02	2,43
VS0660435	75	70	18	53	22	52	0,098	20	160	480	1015x800x1200	BF02	4,29
VS0660445	90	90	21	56	26	56	0,149	20	80	320	1080x800x1200	BF02	5,90
VS0660455	110	100	25	61	31	59	0,223	20	80	240	1039x800x1200	BF02	6,14
VS0660465	125	125	28	66	35	64	0,336	15	60	120	940x800x1200	BF02	12,26
VS0660475	160	150	-	82	41	77	0,640	1	-	80	930x800x1200	BF02	19,29

HTB 67°30' bend*HTB Bogen 67°30'*

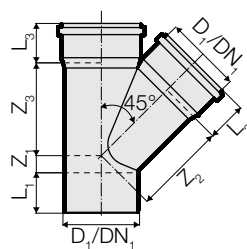
COD.	D	DN	Z ₁	L ₁	Z ₂	L ₂	kg				HxLxP	CL	€/pz
VS0660407	32	30	10	51	15	47	0,025	60	480	3360	1000x800x1200	BF02	2,03
VS0660417	40	40	15	47	19	44	0,035	50	400	2000	1030x800x1200	BF02	2,21
VS0660427	50	50	18	48	22	46	0,046	30	240	1200	1030x800x1200	BF02	3,34
VS0660437	75	70	28	53	33	52	0,109	20	160	480	1015x800x1200	BF02	5,60
VS0660447	90	90	33	56	38	56	0,164	20	80	320	1080x800x1200	BF02	6,62
VS0660457	110	100	40	61	45	59	0,248	20	80	160	940x800x1200	BF02	6,97
VS0660467	125	125	43	66	51	64	0,366	15	60	120	940x800x1200	BF02	18,10

BLACKFIRE RANGE
SORTIMENT BLACKFIRE**HTB 87°30' bend***HTB Bogen 87°30'*

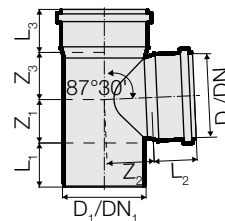
COD.	D	DN	Z ₁	L ₁	Z ₂	L ₂	kg				HxLxP	CL	€/pz
VS0660409	32	30	20	45	19	44	0,025	60	480	3360	1000x800x1200	BF02	2,03
VS0660419	40	40	22	47	25	44	0,036	50	400	2000	1030x800x1200	BF02	2,03
VS0660429	50	50	26	48	30	46	0,047	30	240	1200	1030x800x1200	BF02	2,68
VS0660439	75	70	40	53	43	52	0,116	20	160	480	1015x800x1200	BF02	5,60
VS0660449	90	90	46	56	51	56	0,177	20	80	320	1080x800x1200	BF02	6,32
VS0660459	110	100	57	61	61	59	0,275	20	80	160	940x800x1200	BF02	6,55
VS0660469	125	125	62	66	70	64	0,402	10	40	120	1039x800x1200	BF02	18,10
VS0660479	160	150	-	82	85	77	0,775	1	-	65	930x800x1200	BF02	29,95

Long radius bend**87°30'***Segmentbogen 87°30'*

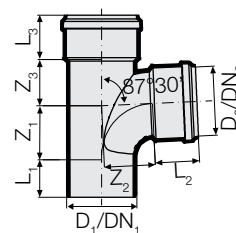
COD.	D	DN	Z ₁	L ₁	Z ₂	L ₂	kg				HxLxP	CL	€/pz
VS0662901	40	40	25	45	30	43	0,042	50	400	2000	930x800x1200	BF02	2,23
VS0662902	50	50	31	46	37	45	0,056	30	240	1200	930x800x1200	BF02	2,80
VS0662903	75	70	48	56	54	52	0,126	15	180	360	930x800x1200	BF02	5,66
VS0662904	90	90	57	56	64	56	0,205	20	80	240	930x800x1200	BF02	6,43
VS0662905	110	100	69	64	78	59	0,294	20	80	160	930x800x1200	BF02	7,05

BLACKFIRE RANGE
SORTIMENT BLACKFIRE**HTEA 45° branch***HTEA Einfachabzweig
45°*

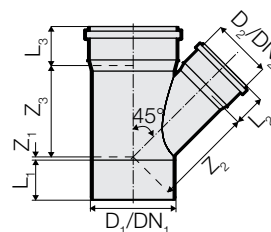
COD.	D ₁	DN ₁	Z ₁	L ₁	Z ₂	L ₂	Z ₃	L ₃	kg				HxLxP	CL	€/pz
VS0660501	32	32	7	50	44	44	44	44	0,043	40	320	1600	1000x800x1200	BF02	4,17
VS0660507	40	40	10	46	49	44	49	44	0,060	20	160	1120	1110x800x1200	BF02	4,46
VS0660513	50	50	12	50	61	46	61	46	0,082	20	160	640	1010x800x1200	BF02	5,36
VS0660519	75	70	19	53	96	52	96	52	0,207	20	80	240	970x800x1200	BF02	7,57
VS0660525	90	90	21	56	110	56	110	56	0,320	20	80	160	940x800x1200	BF02	11,44
VS0660531	110	100	25	61	135	59	135	59	0,484	10	40	80	940x800x1200	BF02	12,86
VS0660537	125	125	28	66	152	65	152	65	0,712	5	20	60	1039x800x1200	BF02	44,65
VS0660543	160	150	-	82	194	77	195	77	1,354	1	-	32	930x800x1200	BF02	69,05

HTEA 87°30' branch*HTEA Einfachabzweig
87°30'*

COD.	D ₁	DN ₁	Z ₁	L ₁	Z ₂	L ₂	Z ₃	L ₃	kg				HxLxP	CL	€/pz
VS0660505	32	32	21	45	17	52	17	52	0,038	40	320	1600	1000x800x1200	BF02	4,17
VS0660511	40	40	19	46	24	44	28	44	0,054	20	160	1120	1110x800x1200	BF02	4,46
VS0660517	50	50	28	50	29	46	29	46	0,076	20	160	800	1030x800x1200	BF02	5,36
VS0660523	75	70	39	53	46	52	46	52	0,179	20	80	240	853x800x1200	BF02	7,57
VS0660529	90	90	48	56	52	56	52	56	0,273	20	80	160	940x800x1200	BF02	11,44
VS0660535	110	100	56	61	65	59	65	59	0,400	10	40	120	970x800x1200	BF02	12,86
VS0660541	125	125	65	66	71	65	71	65	0,579	10	40	80	940x800x1200	BF02	44,65
VS0660547	160	150	-	82	89	78	93	77	1,083	1	-	40	930x800x1200	BF02	69,05

BLACKFIRE RANGE
SORTIMENT BLACKFIRE**87°30' sweep branch***Bogenabzweig 87°30'*

COD.	D ₁ /D ₂	DN ₁ /DN ₂	Z ₁	L ₁	Z ₂	L ₂	Z ₃	L ₃	kg				HxLxP	CL	€/pz
VS0660694	90/90	90/90	57	56	64	56	47	59	0,308	20	80	160	955x800x1200	BF02	13,39
VS0660695	110/75	100/70	48	81	54	52	58	59	0,370	10	60	120	955x800x1200	BF02	13,39
VS0660696	110/90	100/90	57	72	64	56	58	59	0,396	10	40	120	955x800x1200	BF02	13,99
VS0660693	110/110	100/100	69	64	78	66	58	59	0,435	8	32	96	970x800x1200	BF02	23,57

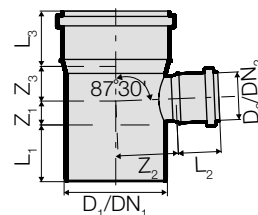
HTEA 45° reducing branch*HTEA Abzweig 45° reduziert*

COD.	D ₁ /D ₂	DN ₁ /DN ₂	Z ₁	L ₁	Z ₂	L ₂	Z ₃	L ₃	kg				HxLxP	CL	€/pz
VS0660551	40/32	40/30	5	52	45	47	42	52	0,052	40	320	1280	1000x800x1200	BF02	4,46
VS0660557	50/40	50/40	5	50	56	44	54	46	0,070	20	160	800	1030x800x1200	BF02	5,36
VS0660563	75/40	70/40	-7	46	79	44	71	52	0,138	25	100	300	853x800x1200	BF02	7,57
VS0660569	75/50	70/50	-1	54	84	46	76	54	0,147	25	100	300	970x800x1200	BF02	7,57
VS0660575	90/40	90/40	-10	56	87	44	76	56	0,191	20	80	240	970x800x1200	BF02	11,44
VS0660581	90/50	90/50	-9	56	90	46	83	56	0,200	20	80	240	970x800x1200	BF02	11,44
VS0660587	110/40	100/40	-24	61	99	44	89	59	0,255	20	80	160	940x800x1200	BF02	12,86
VS0660593	110/50	100/50	-17	61	106	46	79	59	0,279	20	80	160	940x800x1200	BF02	12,86
VS0660599	110/75	100/70	1	61	121	52	112	59	0,356	15	60	120	940x800x1200	BF02	12,86
VS0660689 ♦	110/90	100/90	25	61	162	60	135	59	0,600	10	40	80	930x800x1200	BF02	15,08
VS0660605	125/50	125/50	-24	66	114	46	111	65	0,385	10	40	120	853x800x1200	BF02	29,17
VS0660611	125/110	125/100	18	66	146	59	142	65	0,615	8	32	64	940x800x1200	BF02	29,17
VS0660617	160/110	150/100	-	82	-	-	167	77	0,956	1	-	40	930x800x1200	BF02	46,19
VS0660623	160/125	150/125	-	82	-	-	170	77	1,053	1	-	40	930x800x1200	BF02	46,19

♦ Simple branch with reduced grafted on the derivation. - *Einfachabzweig mit Reduktion auf der Abzweigung.*

BLACKFIRE RANGE
SORTIMENT BLACKFIRE
**HTEA 87°30' reducing
branch**

HTEA Abzweig 87°30'
reduziert

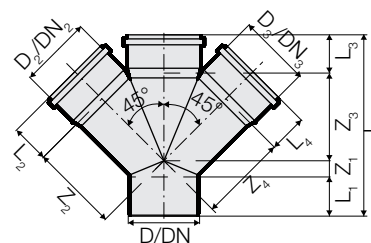


COD.	D ₁ /D ₂	DN ₁ /DN ₂	Z ₁	L ₁	Z ₂	L ₂	Z ₃	L ₃	kg				HxLxP	CL	€/pz
VS0660555	40/32	40/30	18	52	23	50	20	50	0,050	40	320	1280	1000x800x1200	BF02	4,46
VS0660561	50/40	50/40	23	50	29	44	24	46	0,069	25	200	800	1010x800x1200	BF02	5,36
VS0660567	75/40	70/40	22	53	47	44	30	52	0,128	25	100	300	853x800x1200	BF02	7,57
VS0660573	75/50	70/50	27	53	46	46	35	52	0,136	25	100	300	853x800x1200	BF02	7,57
VS0660579	90/40	90/40	23	56	50	44	29	56	0,177	15	60	240	860x800x1200	BF02	11,44
VS0660585	90/50	90/50	24	56	50	46	34	56	0,184	20	80	240	853x800x1200	BF02	11,44
VS0660591	110/40	100/40	21	61	62	44	32	59	0,248	20	80	240	1039x800x1200	BF02	12,86
VS0660597	110/50	100/50	26	61	64	46	37	59	0,256	20	80	240	1039x800x1200	BF02	12,86
VS0660603	110/75	100/70	38	61	67	52	49	59	0,309	15	60	120	940x800x1200	BF02	12,86
VS0660691 ♦	110/90	100/90	56	61	90	60	65	59	0,509	10	40	120	930x800x1200	BF02	15,08
VS0660609	125/50	125/50	28	66	68	46	36	65	0,355	10	40	120	853x800x1200	BF02	29,17
VS0660615	125/110	125/100	58	66	72	59	64	65	0,526	8	32	96	1039x800x1200	BF02	29,17
VS0660621	160/110	150/100	-	82	-	-	67	77	0,816	1	-	65	930x800x1200	BF02	46,19
VS0660627	160/125	150/125	-	82	-	-	75	77	0,911	1	-	65	930x800x1200	BF02	46,19

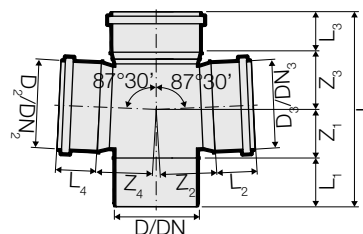
♦ Simple branch with reduced grafted on the derivation. - Einfachabzweig mit Reduktion auf der Abzweigung.

**HTDA Double
branch 45°**

HTDA Doppelabzweig

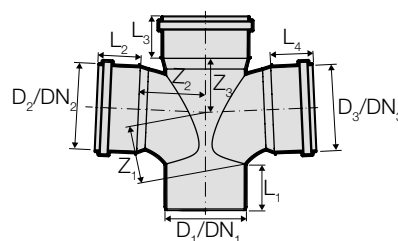


COD.	D _{1/2/3}	DN _{1/2/3}	L	Z ₁	L ₁	Z _{2/3/4}	L _{2/3/4}	kg				HxLxP	CL	€/pz
VS0660655	110/110/110	100/100/100	280	25	61	136	59	0,628	5	20	60	1010x800x1200	BF02	25,60

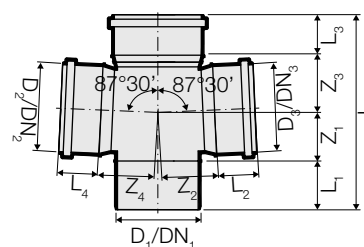
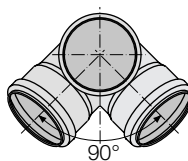
BLACKFIRE RANGE
SORTIMENT BLACKFIRE**HTDA Double branch**
87°30'*HTDA Doppelabzweig*
87°30'

COD.	D _{1/2/3}	DN _{1/2/3}	L	Z ₁	L ₁	Z _{2/4}	L _{2/4}	Z ₃	L ₃	kg				HxLxP	CL	€/pz
VS0660654	110/50/50	100/50/50	181,5	25	60	63	44	42,5	54	0,274	5	40	120	1000x800x1200	BF02	50,96
VS0660656 *	110/110/110	100/100/100	249	64	60	72	52	73	52	0,610	5	20	60	1000x800x1200	BF02	51,49
VS0660659 *	125/110/110	125/100/100	252	59	65	79	52	72	56	0,615	5	20	60	1010x800x1200	BF02	112,63
VS0660667 *	160/110/110	150/100/100	289	61	84	100	52	81	63	0,889	1	-	45	800x800x1200	BF02	200,97

* Welded. - Abzweiger angeschweißt.

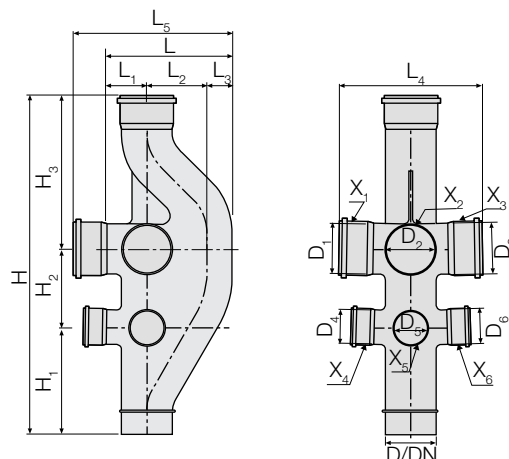
Double swept branch
87°30'*Doppelbogenabzweig*
87°30'

COD.	D _{1/2/3}	DN _{1/2/3}	Z ₁	L ₁	Z ₂	L ₂	Z ₃	L ₃	L ₄	kg				HxLxP	CL	€/pz
VS0662910	90/90/75	90/90/70	57	56	64	56	47	56	53	0,357	15	60	120	955x800x1200	BF02	42,98
VS0662911	90/90/90	90/90/90	57	56	64	56	47	56	56	0,395	12	48	96	955x800x1200	BF02	42,98
VS0662912	110/110/75	100/100/70	69	64	78	66	58	59	52	0,496	5	30	60	955x800x1200	BF02	47,74
VS0662913	110/110/90	100/100/90	69	64	78	66	58	59	56	0,524	5	30	60	955x800x1200	BF02	49,47
VS0662914	110/110/110	100/100/100	69	64	78	66	58	59	59	0,550	5	-	60	955x800x1200	BF02	51,49

HTED Corner
branch 87°30'*HTED Eckabzweig 87°30'*

COD.	D _{1/2/3}	DN _{1/2/3}	Z ₁	Z _{2/4}	Z ₃	L	L ₁	L _{2/4}	L ₃	kg				HxLxP	CL	€/pz
VS0660657	110/110/110	100/100/100	54	77	71	242	63	54	54	0,503	5	20	60	955x800x1200	BF02	53,87
VS0660661	125/110/110	125/100/100	54	77	71	255	71	54	59	0,605	5	20	60	1010x800x1200	BF02	62,99
VS0660662 *	160/110/110	150/100/100	68	100	77	290	78	52	67	0,885	1	-	50	800x800x1200	BF02	200,97

* Welded. - Abzweiger angeschweißt.

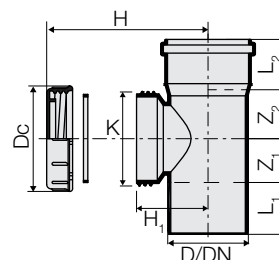
BLACKFIRE RANGE
SORTIMENT BLACKFIRE
VBF
Ventilation branch
Mischformstück


COD.	D	DN	D _{1/2/3}	D _{4/5/6}	L	L ₁	L ₂	L ₃	L ₄	L ₅	H	H ₁	H ₂	H ₃	CL	€/pz
VS0661X ₁ X ₂ X ₃ X ₄ X ₅ X ₆ *	110	100	110	75	265	85	130	50	300	345	780	245	170	365	BF02	**

* X=0 if the inlet has no socket, X=1 if the socket is welded to the inlet. - X bekommt den Wert 0 bei Eingang ohne Muffe, X bekommt den Wert 1 bei Eingang mit Muffe.

A minimum quantity per order is foreseen. Delivery date to be agreed. - Eine Mindestbestellmenge ist erforderlich, um einen Liefertermin zu betätigen.

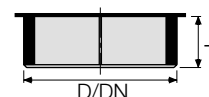
** On request. - Auf Anfrage.

HTRE Inspection
opening with screw
cap
HTRE Reinigungsrohr


COD.	D	DN	Z ₁	L ₁	Z ₂	L ₂	H	Dc	K	H ₁	kg				HxLxP	CL	€/pz
VS0660901	50	50	36	48	35	46	60	90	74	57	0,066	20	160	640	1050x800x1200	BF02	9,65
VS0660903	75	70	40	53	43	52	80	90	74	66	0,174	20	80	240	853x800x1200	BF02	12,09
VS0660905	90	90	49	58	55	56	8	120	105	80	0,245	20	80	160	940x800x1200	BF02	16,02
VS0660907	110	100	55	61	65	59	100	120	105	90	0,332	15	60	120	940x800x1200	BF02	18,81
VS0660909	125	125	65	66	71	65	105	150	128	98	0,524	10	40	80	940x800x1200	BF02	36,79
VS0660911	160	150	64	75	75	73	105	150	128	118	0,790	1	-	62	930x800x1200	BF02	56,55

HTM Closing cap

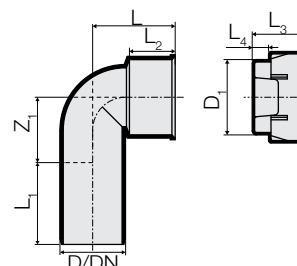
HTM Muffenstopfen



COD.	D	DN	L	kg				HxLxP	CL	€/pz
VS0503035 *	32	30	20	0,005	100	2000	14000	935x800x1200	CC01	0,61
VS0660951	40	40	32	0,012	40	800	5600	935x800x1200	BF02	2,03
VS0660953	50	50	32	0,013	20	400	2800	935x800x1200	BF02	3,10
VS0660955	75	70	32	0,023	15	300	2100	935x800x1200	BF02	4,05
VS0660957	90	90	42	0,035	30	240	1680	1110x800x1200	BF02	6,67
VS0660959	110	100	42	0,067	20	160	1120	1110x800x1200	BF02	9,23
VS0660961	125	125	51	0,099	10	80	560	1110x800x1200	BF02	12,26
VS0660963	160	150	57	0,141	10	80	320	1010x800x1200	BF02	15,24

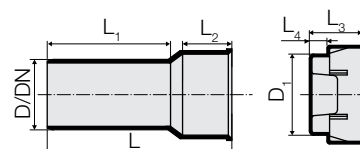
* Blue cap. - Blauer Stopfen.

**HTSW Bend with cap
for trap connection**

 HTSW Siphonbogen mit
Schutzdeckel


COD.	D/D ₁	DN	Z ₁	L ₁	L ₂	L ₃	L ₄	L	kg				HxLxP	CL	€/pz
VS0660971	32/46	30	23	51	27	30	10	50	0,033	20	320	1600	970x800x1200	BF02	5,54
VS0660972	40/46	40	23	51	30	30	10	50	0,043	20	160	1120	1110x800x1200	BF02	5,54
VS0660973	40/53,5	40	28	52	27	30	10	52	0,044	20	160	1120	1110x800x1200	BF02	5,54
VS0660974	50/53,5	50	28	52	28	30	10	52	0,051	20	160	1120	1110x800x1200	BF02	5,54
VS0660975	50/60	50	28	52	28	30	10	52	0,055	20	160	1120	1110x800x1200	BF02	5,54

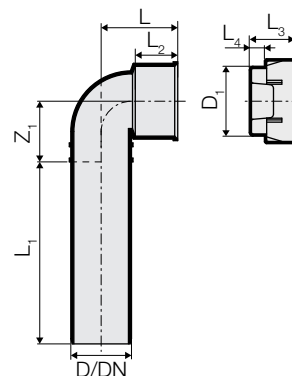
**HTS Straight fitting
with cap**

 HTS Anschlussmuffe mit
Schutzdeckel


COD.	D/D ₁	DN	L ₁	L ₂	L ₃	L ₄	L	kg				HxLxP	CL	€/pz
VS0660981	32/46	30	54	26	30	10	88	0,024	40	320	2240	1110x800x1200	BF02	5,54
VS0660982	40/46	40	54	26	30	10	88	0,028	40	320	2240	1110x800x1200	BF02	5,54
VS0660983	40/50	40	54	28	35	10	88	0,036	20	320	1600	970x800x1200	BF02	5,54
VS0660984	40/53,5	40	38	24	30	10	70	0,031	40	320	2240	1110x800x1200	BF02	5,54
VS0660985	50/53,5	50	54	26	30	10	88	0,033	30	240	1680	1110x800x1200	BF02	5,54

BLACKFIRE RANGE
SORTIMENT BLACKFIRE
HTS Long bend for trap connection

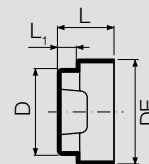
HTS Siphonbongen verlängert mit Schutzdeckel



COD.	D/D ₁	DN	Z ₁	L ₁	L ₂	L ₃	L ₄	L	kg				HxLxP	CL	€/pz
VS0660991	32/46	30	36	124	28	30	10	50	0,047	20	160	1120	1110x800x1200	BF02	6,14
VS0660992	40/46	40	36	124	28	30	10	50	0,053	20	160	1120	1110x800x1200	BF02	6,14
VS0660993	40/50	40	36	119	32	35	10	50	0,056	20	160	1120	1110x800x1200	BF02	6,14
VS0660996	32/50	30	36	119	28	35	10	53	0,048	20	160	1120	1110x800x1200	BF02	6,14

Accessories - Ersatzteile
Protection cap for trap connection bend

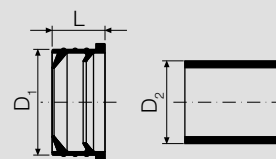
Schutzdeckel für HTSW und HTS



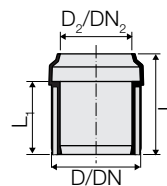
COD.	D	DE	L	L ₁	kg				HxLxP	CL	€/pz
VS0503222	46	55	30	10	0,010	40	800	5600	935x800x1200	CC01	0,61
VS0503224	50	60	35	12	0,016	40	800	5600	935x800x1200	CC01	0,85
VS0503225	53,5	63	30	10	0,013	40	800	5600	935x800x1200	CC01	0,95
VS0503226	60	70	30	10	0,014	40	800	5600	935x800x1200	CC01	0,95

Grommet

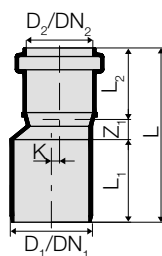
Gummimanschette



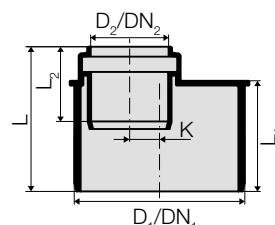
COD.	D ₁	D ₂	L	kg				HxLxP	CL	€/pz
VS0334003	46	24-32	22	0,026	100	800	8000	1130x800x1200	CC01	0,86
VS0334005	46	36-40	22	0,012	150	1200	7200	1060x800x1200	CC01	0,86
VS0523011	50	36-40	22	0,026	30	600	4200	935x800x1200	PP02	2,05
VS0523015	53,5	24-32	22	0,029	30	600	4200	935x800x1200	PP02	2,13
VS0523017	53,5	36-40	22	0,025	30	600	4200	935x800x1200	PP02	2,13
VS0523019	60	46-55	24	0,020	30	600	4200	935x800x1200	PP02	3,97

BLACKFIRE RANGE
SORTIMENT BLACKFIRE**Reducer sleeve***Reduktion konzentrisch*

COD.	D/D ₂	DN/DN ₂	L	L ₁	kg				HxLxP	CL	€/pz
VS0660790	40/32	40/30	65	50	0,025	100	800	4800	970x800x1200	BF02	3,27
VS0660791	50/40	50/40	56	38	0,027	80	640	3200	1030x800x1200	BF02	3,27
VS0660793	90/75	90/70	76	61	0,104	20	160	640	850x800x1200	BF02	5,84
VS0660795	110/90	100/90	81,5	65	0,109	20	160	640	1010x800x1200	BF02	6,67
VS0660797	125/110	125/100	86	68	0,134	30	120	360	853x800x1200	BF02	14,53

HTR Eccentric reducer*HTR Reduktion exzentrisch*

Mod. A

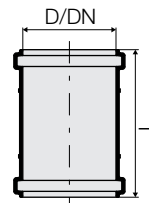


Mod. B

COD.	D ₁ /D ₂	DN ₁ /DN ₂	Mod.	K	Z ₁	L ₁	L ₂	L	kg				HxLxP	CL	€/pz
VS0660701	40/32	40/30	A	0	11	44	45	100	0,024	50	400	2800	1000x800x1200	BF02	3,16
VS0660703	50/32	50/30	A	0	14	47	44	105	0,029	40	320	2240	1000x800x1200	BF02	3,16
VS0660705	50/40	50/40	A	5	12	51	44	107	0,035	50	400	2000	1030x800x1200	BF02	3,16
VS0660707	75/40	70/40	B	9	-	56	39	74	0,055	30	240	1680	1110x800x1200	BF02	4,05
VS0660711	90/40	90/40	B	16	-	59	40	77	0,077	20	160	1120	1110x800x1200	BF02	5,66
VS0660717	110/40	100/40	B	25	-	63	40	79	0,107	20	160	640	1010x800x1200	BF02	6,02
VS0660708	75/50	70/50	A	10	22	52	48	122	0,077	20	160	1120	1115x800x1200	BF02	4,24
VS0660709	75/50	70/50	B	4	-	56	42	73	0,071	30	240	1200	1030x800x1200	BF02	4,05
VS0660713	90/50	90/50	B	11	-	61	42	78	0,079	20	160	1120	1110x800x1200	BF02	5,66
VS0660719	110/50	100/50	B	20	-	63	42	80	0,131	20	160	640	1010x800x1200	BF02	6,02
VS0660715	90/75	70/90	A	5	3	57	47	107	0,104	20	160	640	1010x800x1200	BF02	6,02
VS0660720	110/75	100/70	A	15	28	59	55	142	0,159	20	160	480	1030x800x1200	BF02	6,25
VS0660721	110/75	100/70	B	7	-	63	47	80	0,148	20	160	640	1010x800x1200	BF02	6,02
VS0660723	110/90	100/90	A	7	3	60	50	113	0,169	20	80	320	1080x800x1200	BF02	6,85
VS0660729	125/110	125/100	A	4	6	67	49	122	0,239	20	80	240	970x800x1200	BF02	10,90
VS0660731	160/110	150/100	B	10	-	85	52	103	0,367	1	-	306	930x800x1200	BF02	16,31
VS0660733	160/125	150/125	B	4	-	86	56	105	0,371	1	-	300	930x800x1200	BF02	16,31

BLACKFIRE RANGE
SORTIMENT BLACKFIRE**HTU Sliding sleeve**

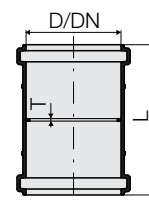
HTU Überschiebmuffe



COD.	D	DN	L	kg				HxLxP	CL	€/pz
VS0660801	32	30	86	0,022	60	480	3360	1000x800x1200	BF02	2,62
VS0660803	40	40	100	0,034	30	240	1680	1110x800x1200	BF02	2,80
VS0660805	50	50	105	0,041	30	240	1680	1110x800x1200	BF02	3,05
VS0660807	75	70	120	0,101	20	160	640	1010x800x1200	BF02	4,65
VS0660809	90	90	120	0,129	20	160	480	1015x800x1200	BF02	6,49
VS0660811	110	100	136	0,198	20	80	240	970x800x1200	BF02	7,21
VS0660813	125	125	147	0,306	20	80	160	940x800x1200	BF02	13,52
VS0660815	160	150	180	0,521	1	-	100	930x800x1200	BF02	20,24

HTMM Double socket sleeve

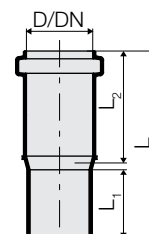
HTMM Doppelmuffe



COD.	D	DN	L	T	kg				HxLxP	CL	€/pz
VS0660851	32	32	85	2	0,022	60	480	3360	1000x800x1200	BF02	2,62
VS0660853	40	40	100	2	0,034	30	240	1680	1110x800x1200	BF02	2,80
VS0660855	50	50	105	2	0,042	30	240	1680	1110x800x1200	BF02	3,05
VS0660857	75	70	120	2	0,102	20	160	640	1010x800x1200	BF02	4,65
VS0660859	90	90	120	3	0,145	20	160	480	1015x800x1200	BF02	6,49
VS0660861	110	100	136	3	0,201	20	80	240	970x800x1200	BF02	7,21
VS0660863	125	125	147	3	0,310	20	80	160	940x800x1200	BF02	13,52
VS0660865	160	150	180	3	0,521	1	-	100	930x800x1200	BF02	20,24

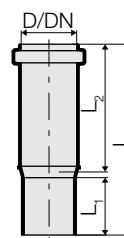
HTL2 Double depth socket

HTL2 Langmuffe 2-Fach



COD.	D	DN	L ₁	L ₂	L	kg				HxLxP	CL	€/pz
VS0660751	40	40	47	75	126	0,036	30	240	1440	965x800x1200	BF02	6,05
VS0660753	50	50	48	79	131	0,051	20	160	1120	1110x800x1200	BF02	6,49
VS0660755	75	70	53	90	150	0,120	20	160	480	1015x800x1200	BF02	7,92
VS0660757	90	90	56	95	159	0,133	10	80	400	1030x800x1200	BF02	10,42
VS0660759	110	100	61	100	169	0,227	20	80	240	970x800x1200	BF02	10,77
VS0660761	125	125	66	108	182	0,345	10	80	160	1050x800x1200	BF02	14,23

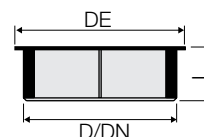
HTLL3 Triple depth socket

 HTLL3 Langmuffe
 3-Fach


COD.	D	DN	L ₁	L ₂	L	kg				HxLxP	CL	€/pz
VS0660771	40	40	47	100	152	0,043	30	240	1440	965x800x1200	BF02	6,05
VS0660773	50	50	48	107	160	0,055	20	160	1120	1110x800x1200	BF02	6,49
VS0660775	75	70	53	124	183	0,121	20	160	480	1015x800x1200	BF02	7,92
VS0660777	90	90	56	129	193	0,170	10	80	320	1010x800x1200	BF02	10,42
VS0660779	110	100	61	136	205	0,260	20	80	160	940x800x1200	BF02	10,77
VS0660781	125	125	66	145	220	0,386	10	40	120	853x800x1200	BF02	14,23

Protection cap for socket

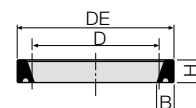
Schutzdeckel für Muffe



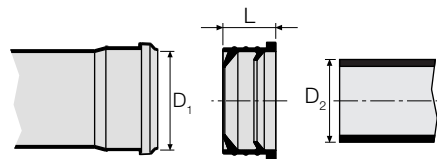
COD.	D	DN	DE	L	kg				HxLxP	CL	€/pz
VS0503035	32	30	37,5	22	0,005	100	2000	14000	935x800x1200	CC01	0,61
VS0503001	40	40	46	38	0,007	40	800	5600	935x800x1200	CC01	0,61
VS0503003	50	50	56	37	0,011	50	800	4000	970x800x1200	CC01	0,61
VS0503005	75	70	85	38	0,020	30	480	2400	970x800x1200	CC01	0,73
VS0503008	90	90	102	37	0,029	30	240	1440	970x800x1200	CC01	0,91
VS0503007	110	100	123	39	0,043	30	240	960	1010x800x1200	CC01	0,91
VS0503009	125	125	135	38	0,047	20	160	640	1010x800x1200	CC01	1,28
VS0503011	160	150	170	51	0,146	10	80	320	970x800x1200	CC01	3,13

Single-lipped seal

Ersatzlippendichtring



COD.	D	DN	DE	H	B	kg		CL	€/pz
VS0391001	32	30	40,5	6	4,9	0,003	50	CC01	0,45
VS0391003	40	40	51,4	7,8	6,5	0,005	50	CC01	0,45
VS0391005	50	50	61,4	7,8	6,5	0,007	50	CC01	0,45
VS0391011	75	70	86,6	7,8	6,5	0,010	20	CC01	0,55
VS0391013	90	80	103	8,9	7,5	0,013	20	CC01	0,68
VS0391015	110	100	123,9	8,9	7,9	0,020	20	CC01	0,70
VS0391017	125	125	142,2	10,2	8,9	0,029	20	CC01	1,10
VS0391019	160	150	179,8	11,5	10,2	0,046	20	CC01	1,45

BLACKFIRE RANGE
SORTIMENT BLACKFIRE**Grommet for socket
to connect pipes of
other materials***Dichtung für Anschluss
an Metallrohr*

COD.	D ₁ (PP)	D ₂ (Metal)	L	kg				HxLxP 	CL	€/pz
VS0559001	40	26-28	24	0,013	50	1000	7000	960x800x1050	PP02	1,94
VS0559003	40	30-32	25	0,012	50	1000	7000	960x800x1050	PP02	1,94