

# RE-2X(St)YSWBV (RE-2Y(St)YSWBV) PiMF, TiMF

Instrumentation cables, screened, armoured, according to EN 50288-7 70 °C, 90 °C/300 V



## Cable structure

- Stranded bare copper core 0,5 mm<sup>2</sup> (7×0,31 mm), 0,75 mm<sup>2</sup> (7×0,37 mm), 1,0 mm<sup>2</sup> (7×0,43 mm), 1,3 mm<sup>2</sup> (7×0,49 mm), 1,5 mm<sup>2</sup> (7×0,52)
- Core insulation cross-linked polyethylene – 2X polyethylene – 2Y
- White and black cores with continuous numbering: a-core black, b-core white. Color code of triple version: white, black, red
- Cores twisted into pairs, pairs stranded in layers, for multicore versions + 1 communication core 0,5 mm<sup>2</sup>, orange
- PiMF, TiMF – pairs in Al-PET foil with tinned copper drain-wire Ø 0,6 mm, wrapping with plastic foil
- Overall screen with Al-PET foil with tinned drain wire 0,5 mm<sup>2</sup> (7×0,31 mm)
- Inner sheath PVC
- Armouring with galvanized steel wire braiding
- Outer sheath of special PVC compound according to DIN VDE 0207 part 5
- Self-extinguishing and flame retardant PVC according to IEC 60332-1-2, IEC 60332-3-24 (Cat. C), color black or blue for hazardous areas with the possibility of explosion or fire -i- (= intrinsically safe)
- Suitable for intrinsically safe systems zone 1+2 group II according to IEC 60079-14

## Technical data

- **Conductor resistance** 0,5 mm<sup>2</sup> max. 36,8 Ω/km  
0,75 mm<sup>2</sup> max. 24,6 Ω/km  
1,0 mm<sup>2</sup> max. 18,4 Ω/km  
1,3 mm<sup>2</sup> max. 14,2 Ω/km  
1,5 mm<sup>2</sup> max. 12,3 Ω/km
- **Temperature range** flexing -5 °C to +50 °C  
fixed -30 °C to +70 °C (2Y)  
-30 °C to +90 °C (2X)
- **Nominal voltage** max. 300 V
- **Test voltage** core/core 2000 V  
core/screen 1000 V
- **Insulation resistance** min. 5 GΩ/km
- **Inductance** max. 0,70 mH/km
- **Cross talk attenuation** at 60 kHz min. 0,88 dB/km  
(1,02 dB/km for PiMF version)
- **Mutual capacitance** max 115 nF/km
- **Minimum bending radius** fixed approx. 10× cable diameter
- **Minimum bending radius** flexing approx. 15× cable diameter

## Application

Armoured instrumentation and data cables are used for data transfer up to 200 kbit/s in control and operating processes, where cables are exposed to high mechanical stress. Screened pairs are protected against electrostatic interferences. Low attenuations and low mutual capacitances enable long transmission distances and fast pulse acceleration. These data cables are ideal for fixed installation in dry or wet areas as well as for indoor or outdoor installation.

## Note

CE = the product is conformed with the EC Low-Voltage Directive 73/23/EEC.  
Conforms to RoHS.

Technical changes reserved.

Part No. black sheath	Part No. blue sheath	Number of cores x core cross-section [mm <sup>2</sup> ]	Approx. outer Ø [mm]	Copper weight [kg/km]	Approx. cable weight [kg]
<b>RE-2X(St)YSWBV (RE-2Y(St)YSWBV)</b>					
0320310	0320320	1 × 2 × 0,5	9,0	15	123
0320311	0320321	2 × 2 × 0,5	11,5	24	170
0320312	0320322	4 × 2 × 0,5	13,5	44	234
0320313	0320323	6 × 2 × 0,5	15,8	64	243
0320314	0320324	8 × 2 × 0,5	16,5	84	326
0320315	0320325	10 × 2 × 0,5	19,1	103	378
0320316	0320326	12 × 2 × 0,5	19,5	123	460
0320330	0320340	1 × 2 × 0,75	9,5	17	130
0320331	0320341	2 × 2 × 0,75	13,0	34	179
0320332	0320342	4 × 2 × 0,75	15,0	64	246
0320333	0320343	6 × 2 × 0,75	17,5	94	256
0320334	0320344	8 × 2 × 0,75	18,0	124	343

Part No. black sheath	Part No. blue sheath	Number of cores x core cross-section [mm <sup>2</sup> ]	Approx. outer Ø [mm]	Copper weight [kg/km]	Approx. cable weight [kg]
0320336	0320346	12 × 2 × 0,75	21,0	184	485
0320338	0320348	24 × 2 × 0,75	25,8	364	900
0320350	0320360	1 × 2 × 1	10,0	23	176
0320351	0320361	2 × 2 × 1	11,0	45	243
0320352	0320362	4 × 2 × 1	16,0	86	335
0320353	0320363	6 × 2 × 1	18,8	126	347
0320354	0320364	8 × 2 × 1	19,5	167	466
0320355	0320365	10 × 2 × 1	21,8	208	540
0320356	0320366	12 × 2 × 1	23,0	289	658
0320370	0320380	1 × 2 × 1,3	10,5	34	185
0320371	0320381	2 × 2 × 1,3	14,0	60	256
0320372	0320382	4 × 2 × 1,3	17,0	114	352

# RE-2X(St)YSWBY (RE-2Y(St)YSWBY) PiMF, TiMF

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0320373	0320383	6 × 2 × 1,3	20,0	173	366	0320525	0320535	10 × 2 × 0,75	19,5	198	513
0320374	0320384	8 × 2 × 1,3	21,0	218	491	0320526	0320536	12 × 2 × 0,75	22,5	237	625
0320375	0320385	10 × 2 × 1,3	24,5	288	569						
0320376	0320386	12 × 2 × 1,3	25,0	322	693	0320541	0320561	2 × 2 × 1	14,2	45	251
0320470	0320480	1 × 3 × 1,3	11,0	45	229	0320542	0320562	4 × 2 × 1	16,8	86	346
0320471	0320481	6 × 3 × 1,3	23,0	258	660	0320543	0320563	6 × 2 × 1	19,7	126	359
						0320544	0320564	8 × 2 × 1	21,1	167	482
0320396	0320406	12 × 2 × 1,5	30,0	364	720	0320545	0320565	10 × 2 × 1	23,3	208	558
<b>RE-2X(St)YSWBY PiMF, TiMF (RE-2Y(St)YSWBY PiMF, TiMF)</b>											
0320501	0320511	2 × 2 × 0,5	12,0	33,0	220	0320546	0320566	12 × 2 × 1	25,4	248	680
0320502	0320512	4 × 2 × 0,5	14,0	62,0	302						
0320503	0320513	6 × 2 × 0,5	16,0	90,0	313	0320653	0320663	4 × 3 × 1	15,0	146	438
0320504	0320514	8 × 2 × 0,5	18,0	119,0	421	0320655	0320665	8 × 3 × 1	21,0	281	733
0320505	0320515	10 × 2 × 0,5	23,3	147,0	488						
0320506	0320516	12 × 2 × 0,5	24,0	176,0	594						
0320521	0320531	2 × 2 × 0,75	14,0	43	231	0320571	0320581	2 × 2 × 1,3	14,5	68	283
0320522	0320532	4 × 2 × 0,75	15,5	82	318	0320572	0320582	4 × 2 × 1,3	17,5	124	390
0320523	0320533	6 × 2 × 0,75	17,0	121	330	0320573	0320583	6 × 2 × 1,3	20,5	181	405
0320524	0320534	8 × 2 × 0,75	19,0	160	443	0320574	0320584	8 × 2 × 1,3	22,0	239	543
						0320575	0320585	10 × 2 × 1,3	24,3	296	629
						0320576	0320586	12 × 2 × 1,3	26,5	353	767